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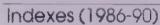
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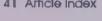
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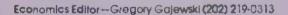
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## News of 1991 Commodity Prospects, Farm Income, Exports, and Inputs

orld grain, oilseed, and meat output are expanding in 1990/91, following last season's rebounds. Consumption, however, is forecast to grow more moderately, and ending stocks of some commodities are expected to rise.

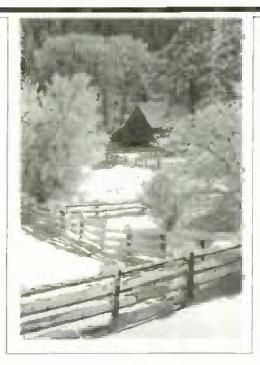
In the U.S., commodity price movements will be mixed. For the marketing year, the average prices of wheat, milk, barley, oats, and rice are expected to be lower than a year earlier, while the prices of corn, soybeans, and most meats will be about even to slightly up.

The mix of crops U.S. farmers will plant in 1991 likely will change more than in recent years. Farmers will be reacting to the planting flexibility provisions of the new farm bill and will be more responsive to changing market prices. Plantings of oilseeds, cotton, and corn are expected to rise, while wheat acreage will decline.

With trend yields and less area planted to wheat, U.S. grain production would slip in 1991/92. Favorable weather abroad in 1990 pushed foreign wheat and coarse grain yields above trend. If yields revert to trend and planted acreage remains steady, foreign grain output would decline as well, perhaps lending some support to prices.

U.S. farmers should look for near-record incomes in calendar 1991. Cash receipts from crops are expected to rise, while livestock receipts will be about even with 1990. However, higher expenses and lower government payments will put downward pressure on income. Farmers' net cash income probably will be down 2-3 percent from 1990's record \$59 billion. And net farm income is expected to slip 5 percent from the 1990 record.

Farmers' equity is expected to grow 2 percent in 1991, primarily because farmland values are forecast up 2-4 percent.



When adjusted for the 4- to 5-percent inflation likely for 1991, farm equity and land values will contract. Demand for credit may increase slightly. The inflation-adjusted rate of return on farm equity is forecast to be 3-4 percent, about even with 1990.

U.S. farmers' out-of-pocket expenses for inputs are forecast up 2-6 percent in 1991, reaching \$127-\$133 billion. Much of the rise is linked to higher energy prices. In addition, farmers' purchases will rise because more input-intensive row crops—cotton, corn, and oitseeds—will be planted in 1991.

U.S. agricultural exports are forecast to drop \$1.6 billion to \$38.5 billion in fiscal 1991. Export volume is expected to be off 6 percent. Larger harvests by traditional importers and competitors explain much of the drop.

U.S. farm commodity sales to the Soviet Union are expected to be about \$2 billion in fiscal 1991, down \$1 billion from a year earlier. Behind the expected drop are a near-record Soviet grain crop, limited foreign exchange reserves, and a sharp rise in food aid and export credits offered by competitors. The U.S. has offered the Soviets export credits of \$1 billion.

Global wheat production rose 11 percent this season compared with 1989/90. Even with use forecast up 6 percent, ending stocks are expected to jump 23 percent. Despite much lower wheat prices, global trade volume will remain unchanged in 1990/91. Both the EC and the U.S. have stepped up use of export subsidies.

Record Asian rice crops are pulling world production to an all-time high in 1990/91. Consumption will lag output, and stocks will rise slightly as trading prices fall. With normal weather, output will remain large in 1991/92, and continue to pressure prices.

World coarse grain output is forecast up 2.5 percent in 1990/91, with most of the gain in the Soviet Union, the U.S., and China. Consumption will drop marginally as producers continue feeding relatively cheaper wheat to livestock. Still, output will trail use, ending stocks will fall, and most prices will remain firm.

For 1991, U.S. corn area likely will rise 1-3 million acres. With trend yields, this would push up production 2-6 percent.

U.S. beef production is forecast up 1 percent in calendar 1991, while pork production likely will rise 3 percent. Broiler output growth will slow to 5-6 percent and turkey production will increase 5-7 percent. Several factors are contributing to an uncertain outlook for livestock and meat markets, headed up by concerns about recession.



## Output Is Rising And Income Slipping

n 1990/91, world crop production and animal product output are expanding from last year's increased levels. Consumption gains, however, will be more moderate and use of a few commodities will be down. Look for commodity prices to be on par with last year or higher for com, soybeans, and most meats. However, prices for wheat, milk, barley, oats, and rice are expected to average lower than a year earlier.

U.S. acreage will expand for several crops in 1991 as producers take advantage of more planting flexibility under the new farm program provisions. Plantings of oilseeds, cotton, and com are expected to rise, while wheat acreage will decline. With trend yields and less acres planted to wheat, U.S. grain output in 1991/92 would slip.

For other countries, favorable weather conditions in 1990 pushed wheat and coarse grain yields 3 percent above trend. If yields revert to trend in 1991, they would be 1 percent below 1990's actual yields. Lower yields and stable acreage would suggest less foreign grain production in 1991/92.

This outlook points to near-record U.S. farm income in calendar 1991. Cash receipts will rise with larger marketings and higher prices for a few commodities. At the same time, production expenses will increase a bit more, in part reflecting higher energy costs.

Farmers' net cash income in 1991 is forecast to be \$55-\$60 billion, 2-3 percent below 1990's record \$59 billion. Net farm income is expected to be off as well, at \$44-\$49 billion, compared with 1990's record \$49 billion.

Net farm income measures the value of production plus government payments less all costs in a calendar year, while net cash income reflects commodities sold plus government payments less out-of-pocket costs.

The 1991 outlook calls for larger food supplies in the U.S., dampened inflation, and a slower rise in food prices. Retail food prices are forecast to increase 2-5 percent, well below last year's estimated 6 percent.

World commodity consumption will show at least modest gains for most commodities, responding to: real economic growth of around 2 percent, a 2-percent rise in meat output (bolstering demand for feeds), and population growth of 1.7 percent.

#### Grain Stocks Are Rising

For the last 3 years, global grain consumption has surpassed output, causing stocks to drop. While grain consumption is rising another 2 percent in 1990/91, production is up 5 percent to a record. Still, ending stocks are expected to equal only 18 percent of yearly use, below the long-term average.

U.S. grain production also is slightly above use. Domestic consumption will move up, but exports will decline and ending stocks will rise. Nonetheless, stocks will remain at a relatively low 21 percent of use.

Wheat accounts for much of this year's grain crop increase. In fact, the increase in global output this year is larger than the entire 1989 U.S. wheat crop. The global wheat outlook for 1990/91 also calls for about unchanged world trade and a sharp rise in stocks, despite an anticipated jump in world consumption. Yet ending stocks will remain well below levels of the mid-1980's because beginning stocks were so low.

The outlook for U.S. wheat in 1990/91 is for a near-record crop, lower carryin stocks, smaller exports, larger domestic use, and possibly the highest ending stocks since 1987/88.

World wheat trade in 1989/90 was largely unchanged from a year earlier and, despite the lowest prices in years, no change in volume is expected in 1990/91. The world's two largest wheat importers—China and the USSR—harvested record or near-record crops.

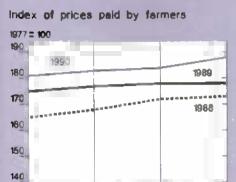
U.S, wheat production likely will be down substantially in 1991 because of relatively weak prices, higher acreage reduction requirements, and the new base flexibility. The relatively low world prices also could result in smaller foreign production, although the drop may be constrained by a lack of alternative crops.

Global rice production in 1990/91 is forecast up 2 percent from last season's bumper crop to a record high. A favorable monsoon over most of South and Southeast Asia led to record yields for many countries.

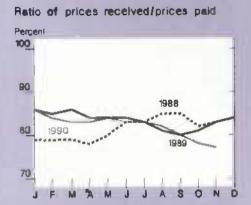
U.S. production in 1990/91 is essentially unchanged from a year earlier, although milling quality is not as high. Domestic use is forecast to rise nearly 8 percent, more than offsetting lower exports. Given normal weather, global rice output will remain large in 1991/92 and prices decline further.

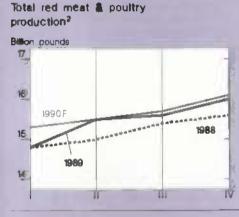
#### **Prime Indicators**

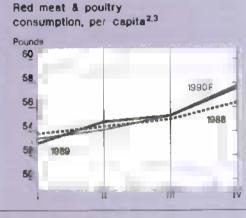
#### Agricultural Economy

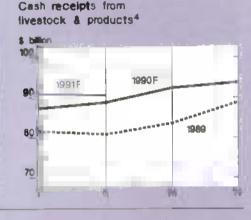


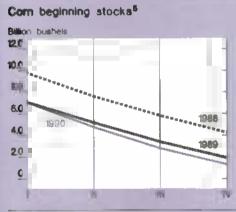


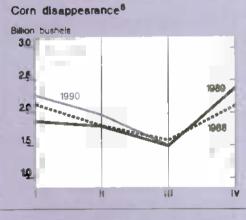


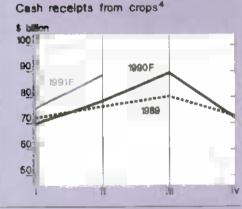


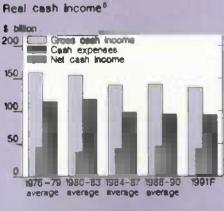


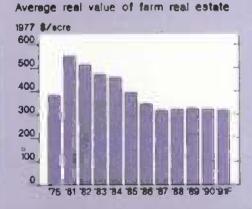


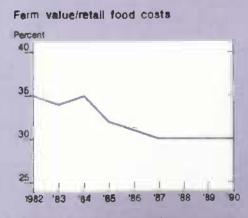












<sup>1</sup>For all farm products: <sup>2</sup>Calendar quarters: Future quarters are forecasts for livesfock, com, and cash receipts <sup>3</sup>Retail weight Seasonally adjusted annual rate \*In Dec.—Feb.: IIn May, Min.—May: IV=Sept.—Nov., \*Coah expenses plus not cash income equals pross cash income
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#### Feed Grain Output To Continue Up

The global coarse grain outlook for 1990/91 is highlighted by larger output but a further decline in stocks, especially in the U.S. Smaller imports by the USSR, Mexico, Japan, and several smaller importers are forecast to reduce world coarse grain trade 11 percent. U.S. exports are forecast down 14 percent, led by a drop in corn sales.

World production in 1990/91 is forecast up 2.5 percent from a year earlier, reflecting both larger U.S. and foreign crops. Foreign beginning stocks were down 7 percent from a year earlier and U.S. beginning stocks were down more than 30 percent, offsetting the larger production and slightly lowering world supplies.

The 1990/91 U.S. corn crop of nearly 8 billion bushels is the largest since 1986/87, with both harvested acres and yields up. Domestic corn use continues to expand this season, while exports are falling due in large part to sharply lower sales to the Soviets. Still, total use will exceed the crop and stocks will decline 8 percent.

U.S. corn production likely will increase in 1991, assuming trend yields. Foreign coarse grain production probably will rise as well, although little change is expected in plantings by the major competitors.

Global oilseed supplies are forecast to set a record, up 3 percent from 1989/90. Most of the gain is in oilseeds other than soybeans, and mainly concentrated in net importing countries, such as the EC, China, and India.

So, competition with U.S. soybeans is less obvious than when soybean production increases in exporting countries. It also means more pressure on oil supplies than on meals because the production gains are in crops with higher oil content.

World soybean production is forecast to be down very slightly in 1990/91, with both U.S. and South American crops on the decline. World demand for soybeans and their products has been sluggish all year. And, while global soybean meal use will rise in 1990/91, it will fall below trend growth rates.

U.S. soybean supplies are expected to exceed total use in 1990/91, leading to a further buildup in stocks. Domestic use is rising but a likely decline in exports will hold total use about flat. Soybean prices probably will average near a year earlier as stocks build. In addition, prospective higher oilseed plantings in the U.S. for the 1991/92 crop may act to restrain prices in late 1990/91.

#### Cotton & Sugar Markets Remain Tight

Global cotton production and consumption are closely matched in 1990/91. Ending stocks will be about even with a year earlier, when they were the lowest in a decade. Output is almost one-tenth above last season because higher prices are spurring production in the U.S., China, India, Pakistan, Turkey, and Australia.

However, global use this season is down about 1 percent from 1989/90's record high, reflecting tight supplies in the U.S. and China and economic problems in the Soviet Union and Eastern Europe. World trade is expected to exceed last season's volume.

Although the U.S. cotton crop is up one-fourth to more than 15 million bales in 1990/91, total use is expected to be greater, causing ending stocks to decline 13 percent. Stocks relative to use are the lowest in 40 years. The early season outlook for 1991/92 calls for higher U.S. production to meet continuing strong use and to provide adequate carryover.

World sugar production and consumption are expected to be in near balance in 1990/91. Output and use were also closely balanced last season, but that was after 4 consecutive years when consumption outstripped production, and stocks were pulled down to very low levels.

World sugar stocks remain tight. Carryover at the end of the 1990/91 season—looking at each country at the end of its own marketing year when stocks are at their lowest—is forecast to be 17 percent of consumption, similar to last season and well below the average of the 1980's. Continued tight supplies should keep prices around 9-10 cents a pound.

In 1990/91, U.S. sugar production declined for the third straight year, reflecting drought and freeze damage. Ending stocks are expected to remain near last season's low, accounting for less than 16 percent of the year's total use. The relatively tight supplies are expected to keep domestic prices firm.

## Poultry To Lead Meat Output Gains

World output of animal products likely will increase a little over 2 percent in calendar 1991, following an expected rise of less than 1 percent in 1990. Red meat production was down slightly last year, but an increase of almost 2 percent is expected in 1991.

Global poultry meat output continues to expand, up over 4 percent annually in 1990 and 1991. Beef production has not changed much during the last 4 years and little change is anticipated for 1991. Pork production slipped a little in 1990, but a small rebound is likely this year.

In the U.S., meat production in 1991 is expected to increase over 3 percent from 1990's record. Last year, beef and pork production slipped while broiler output expanded more than 6 percent. Beef, pork, and broiler output are all expected to rise in 1991.

In 1991, cow slaughter likely will increase slightly and, with larger fed slaughter, will raise beef production about 1 percent.

Pork production dropped around 3 percent last year but probably will rise about 3 percent in 1991. Producers have had higher returns for over a year—and their response is expected to remain muted

#### GATT Talks Suspended

The Brussels GATT meeting that was to have ended the 4-year-old Uruguay Round of trade negotiations instead concluded on December 7 without a final agreement. The negotiations became deadlocked over agricultural trade. The EC maintained its position to cut farm support only 30 percent from 1986 levels. The U.S. and the Cairns Group insisted on much larger cuts. A last-minute effort to compromise on agriculture was rejected by the EC, suspending the talks.

If the U.S. does not enter into an agreement by June 30, 1992, the Secretary of Agriculture is required by law to boost export assistance, offer wheat and feed grain marketing loans, and may also waive the minimum Acreage Reduction Program requirements for the 1993-95 crops of wheat, feed grains, upland cotton, and rice.

Mats Hellström, Sweden's farm minister and chairman of the GATT working group on agriculture, proposed an 11th-hour compromise for the agricultural trade talks on December 6, the day before the final session was to end.

The compromise proposal called for concessions in these areas:

- Domestic support: The most tradedistorting measures would be reduced 30 percent in equal installments.
- Adjustment period: Countries would have 5 years beginning January 1, 1991, through December 31, 1995.
- Base year: Changes would be based on 1990 or the nearest financial or marketing year for which data are available.

- Market access: Import access for all products, including processed goods, would be maintained as in 1990. Where import levels are not significant, the minimum level of access would be 5 percent of 1990 domestic consumption starting in 1991. During 1991-95, protection would be reduced 30 percent from the 1990 level.
- Export subsidies: Total or per-unit budget expenditures on export assistance, or the quantity of a product on which export assistance is paid, would be progressively reduced. If export volume is chosen, the base level would be the average quantity exported with assistance during 1988-90. The value of export assistance or quantity exported with export assistance would be reduced 30 percent over 5 years.
- Developing countries: LDC's
  would have flexibility to reduce
  market protection by 50-100 percent of the reduction rate applied to
  developed countries. And the
  adjustment period could be
  extended up to another 5 years.

The 5-year adjustment period, 1991-95, contrasts with the EC's 10-year adjustment period, 1986-95, for which it sought credit for policy reforms put in place since 1986. The U.S. also had proposed a 10-year adjustment period, 1991-2000, which goes 5 years beyond the Hellström proposal. The proposed base year, 1990, contrasts with the EC's 1986 and the 1986-88 average proposed by the U.S., and would have resulted in larger cuts in EC support.

The 30-percent reduction in domestic support was extended to border protection and export subsidies in the compromise proposal. The U.S. and Cairns Group's proposals required specific commitments in all three areas of support, while the EC had only offered specific cuts on internal support. The requirement that import access be maintained at 1990 levels

and that protection be subsequently reduced 30 percent over 1991-95 would have prevented the EC from raising duties on imports of oilseeds, oilseed products, and nongrain feeds.

Higher protection on these products was part of the EC's "rebalancing" proposal, which was vigorously opposed by the U.S., the Cairns Group, and numerous developing countries.

Heilström's proposal that either budget outlays for export subsidies or quantities exported with export subsidies would be cut 30 percent contrasts with the EC's lack of any specific commitment on export subsidies other than that they shall not exceed import levies on the same product. The proposed cuts in export subsidies were substantially less than the 90-percent cut sought by the U.S. and the Caims Group.

The EC Agricultural Commissioner, Ray Mac Sharry, while acknowledging some positive aspects of the Hellström proposal, rejected it as a basis for negotiation. The U.S. had questions about the proposal but considered it a basis for negotiations. The Cairns Group supported it but also wanted to scrutinize the plan. Japan criticized it on the basis that the 5-percent minimum access provision would require it to allow some rice imports.

After the failure of the compromise proposal, GATT officials declared that the negotiations were postponed. Talks are scheduled to resume in Geneva on January 15. An acceptable compromise will have to be found soon. Under "fast-track" negotiating authority, the President must notify Congress of his intention to sign a completed agreement no later than March 1, 1991. Congress may then only approve or disapprove the entire agreement, without changes or amendments. [Walter H. Gardiner and Mary Anne Normile (202) 219-0610]

this year. Barrow and gilt prices are forecast to remain near last year's \$54-\$55 per cwt. This would mean another year of positive returns given expectations of feed costs.

Broiler producers continue to enjoy an unprecedented period of solid returns. Broiler production likely gained around 6 percent in 1990 and prices slipped 4 or 5 cents a pound from 1989's relative highs. Production is expected to increase again in 1991, but the rate of growth probably will slow slightly. Prices are expected to average near last year's.

Milk production during 1990/91 is expected to rise around 2 percent as increased milk per cow more than offsets a slight decrease in milk cow numbers. In the first quarter of the 1990/91 marketing year, prices probably averaged nearly \$3 per ewt lower than a year earlier. Prices will remain down for the rest of the year.

#### Policy, Weather Shape 1991/92 Outlook

Two developments will greatly influence U.S. crop production in 1991/92: producer responses to more planting flexibility under the 1990 farm program, and the impact of weather on crop yields.

In 1990, U.S. farmers held around 60 million acres out of production, and planted acreage was down 1 percent. Some of the 24 million acres that were held out under annual programs will be brought back into production this year if acreage reduction program requirements are lowered for cotton and feed grains. But for wheat, the ARP will be up sharply from last year's 5 percent.

The mix of acreage planted for 1991 crops will shift in response to greater flexibility under provisions of the new farm and budget acts. Producers will be allowed to plant a variety of crops on up to 25 percent of their crop acreage base. Soybeans, other oilseeds, and cotton are expected to effectively compete for this flexible acreage with wheat, feed grains, and rice.

U.S. crop yields exceeded trend in 1990/91, reflecting improved soil moisture and favorable growing and harvesting conditions. For the combined crops of wheat and feed grains, trend growth in yields is about 1.5 percent per year. For 1991/92, trends would suggest about the same yields as in 1990. Trend yields for the 1991 crop and less acreage, because of a reduction for wheat, would mean smaller grain production for 1991/92.

## What Will Happen To U.S. Exports?

Developing countries have shown the most growth in agricultural imports, and U.S. farmers depend increasingly on sales to these countries. Over one-half of U.S. grain exports now go to developing countries. The pace of these countries' imports could increase in the 1990's, depending on the final outcome of the suspended GATT talks.

For imports by developing countries to grow, trade and farm policy reforms are needed that boost global trade, lead to a faster economic recovery, and reduce debt burdens. The U.S. is in an excellent position to supply larger amounts of feed-stuffs as these countries increase meat production.

Economic growth in the Soviet Union, China, and Eastern Europe will reflect efforts to restructure their economies. Many of these countries will strive to become self-sufficient in agricultural production. About one-fifth of their grain imports came from the U.S. last year, slightly higher than in the mid-1980's. At least for the short term, these countries will need relatively large agricultural imports.

Industrialized countries abroad have expanded production and exports of agricultural products, while cutting back on imports. Proposed reforms would significantly affect production and trade in grains and oilseeds by these countries.

For example, in the EC, lower trade restrictions and farm policy reforms would result in larger imports, opening markets for U.S. agricultural products. Or, if Japan opened markets for imported rice, U.S. exports to that market would help increase total rice trade. [James R. Donald (202) 447-6030]

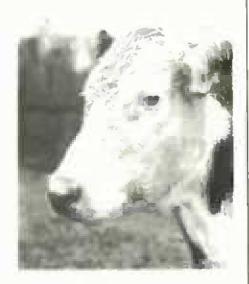
#### Upcoming Releases from USDA's Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued in January.

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- B Poultry Slaughter
- 9 Vegetables Vegetables - Preliminary
- 11 Crop Production
  Crop Production Annual
  Grain Stocks
  Rice Stocks
  Winter Wheat & Rye Seedings
- 15 Potato Stocks
- 16 Milk Production Turkey Hatchery
- 18 Turkeys
  Noncitrus Fruits &
  Nuts Preliminary
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- 24 Crop Values
- 25 Cattle on Feed Livestock Slaughter
- 29 Eggs, Chickens, & Turkeys Layers & Egg Production - Annual
- 30 Peanut Stocks & Processing
- 31 Agricultural Prices

#### Livestock Highlights



## Red Meat Output To Rise Slightly

Red meat markets in the U.S. face an uncertain outlook in 1991 which will probably lead to conservative responses from both producers and consumers. A number of factors contribute to the uncertain outlook, headed up with concerns about recession.

Despite the uncertainty, U.S. red meat consumption for 1991 is forecast to be around 227 pounds per person, retail weight, up about 6 pounds from 1990.

Beef production is forecast to expand about as fast as population growth, almost 1 percent, while pork production is expected to be up about 3 percent. Lamb and mutton output should be little changed from a year earlier, but yeal production is forecast to decline about 8 percent.

Feed grains, protein meal, and forage supplies are expected to be adequate to support the expansion with little change from 1990's production costs. Feed prices continue to favor wheat feeding in some areas. However, wheat feeding in 1991 probably will be less than a year earlier.

#### Cattle Herd Remains Below Peak

A modest cattle herd expansion is underway and likely will last through the mid-1990's. However, the herd probably will peak well below the peaks of earlier cycles during the mid-1980's and 1970's.

Nonetheless, several factors indicate that any given herd size will produce larger quantities of meat and milk in the 1990's than in earlier years. One is the trend toward a smaller percentage of the calf crop being slaughtered as calves. Another is the trend toward more meat and milk output per cow.

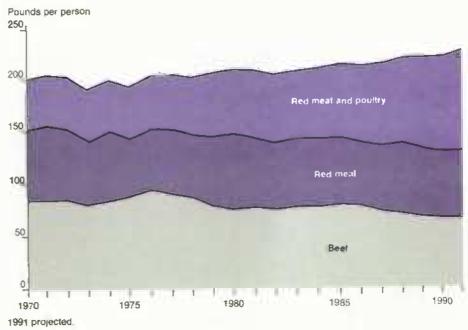
The 1991 calf crop is forecast to expand by about a half-million head to 40.5 million due to favorable cow-calf operator returns. Cow-calf operator cash returns have been positive since 1986. Returns in 1989 were \$64 per cow and are forecast to be unchanged in 1990 and 1991. Overall, the herd rebuilding has been quite constrained compared with previous periods of positive returns.

The supply of feeder cattle is expected to remain tight in 1991 due to reduced calf crops during the last few years and the incentive to retain heifers for replacements. However, the low supply will be slightly tempered by continued greater imports of feeder cattle from Mexico and Canada.

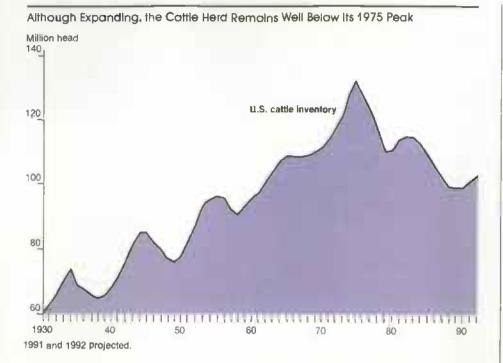
Cattle slaughter in 1991 is forecast to be almost 34 million head, 1-2 percent above a year earlier. Fed cattle slaughter is forecast to continue up and will account for 79 percent of total slaughter. Nonfed steers and heifers are expected to continue declining due to strong incentives to produce grain-fed beef.

Cow slaughter is expected to be near 5.9 million head in 1991, slightly above a year earlier, but well below the historic norm. More beef cows are being retained in herds, but dairy cow slaughter may rise in second-half 1991. The greatest year-over-year increases in quarterly eattle slaughter are expected during the last half of 1991. Average slaughter weights for the year are expected to be about unchanged.





#### Livestock Highlights



#### Hog Operations Consolidating

Since 1980, per capita pork consumption, carcass weight basis, has generally been between 63 and 70 pounds. Yet, over the same time the number of hog producers has declined substantially. Smaller scale hog farmers exited the industry, while more specialized larger scale producers accounted for an increasing share of production. This trend is expected to continue, with remaining producers concentrated in the Corn Belt.

Per capita pork consumption in 1991 is forecast to be about 65 pounds, compared with 63.5 pounds a year ago. Hog producers' returns for farrow-to-finish operations were quite favorable during most of 1990, peaking at around \$25 per cwt over cash costs in the second quarter.

Given the extended period of positive returns and favorable feed prices, hog producers' response was quite conservative in 1990. And the present pork supply is tighter than earlier anticipated.

From a cyclical perspective, some expansion in pork output is expected in 1991, with production forecast to be up about 3 percent from a year earlier. By second-quarter 1991, year-to-year expansion is expected to get under way and accelerate as the year progresses.

## U.S. Beef Imports To Drop

The U.S. will continue to be a major net importer of beef and pork in 1991. U.S. beef exports grew sharply during the 1980's, from under 200 million pounds, carcass weight, in 1980 to over 1 billion pounds by the end of the decade, due mostly to opening Pacific Rim markets. Beef exports are forecast to be unchanged or slightly up in 1991 from last year.

U.S. beef imports are expected to decrease slightly in 1991 from 2.3 billion pounds (carcass weight). Exports from Australia are expected down as well. However, if Japan's beef imports slow in 1991, Australia likely will divert a larger share of its shipments to the U.S. And this could hold down the decline in U.S. imports.

Pork imports are estimated to have totaled around 920 million pounds in 1990 (carcass weight equivalent), compared with less than 900 million a year earlier and 1.14 billion in 1988. Imports are forecast to expand to around 965 million pounds in 1991. In 1991, pork exports are also expected to increase to around 255 million pounds, compared with 228 million a year earlier.

#### Little Change In Beef & Pork Prices

Annual average retail Choice beef prices in 1991 are forecast unchanged to slightly up from a year earlier. The Choice beef price in 1990 was around \$2.79 per pound, about 5 percent above a year earlier.

Retail pork prices in 1991 are expected to average near 1990's \$2.11 per pound, with year-over-year increases expected in the first two quarters and declines expected later. A sharp expansion in poultry supplies will provide increasing competition in retail markets.

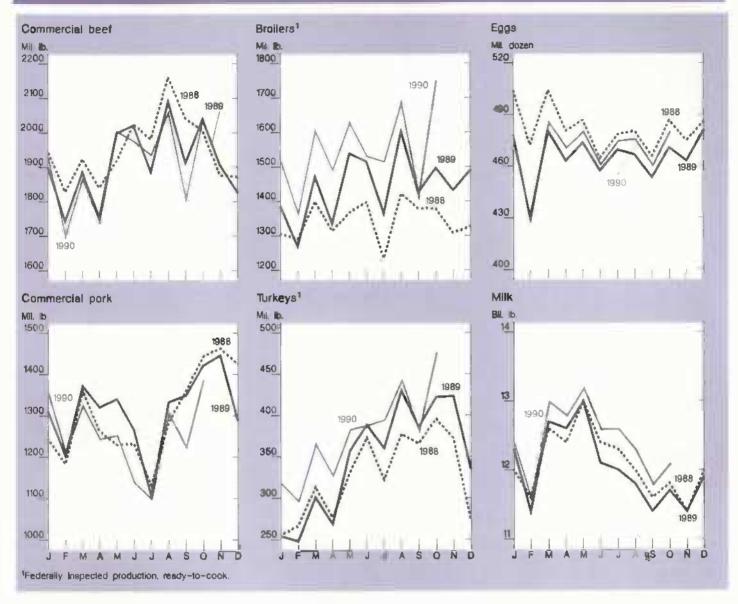
Annual average Choice steer prices at Omaha are forecast to average \$75-\$81 in 1991, compared with near \$77 last year. High fed cattle prices and unchanged costs of grain are expected to result in strong bidding for feeder and stocker cattle in 1991.

Prices for 600- to 700-pound feeder steers at Kansas City are expected to hold near or above 1990's \$90 per cwt, with continuing strong premiums for lighter weight stockers to be retained on forage. Utility cow prices will continue to hold at or slightly higher than last year's \$53 due to expected continuing low beef cow slaughter and strong demand by ranchers for replacement cows.

This year, the seven market barrow and gilt price is expected to average \$50-\$56, compared with near \$54 in 1990. Quarterly year-to-year prices in 1991 are expected to drop below the highs seen in the second quarter of last year. The

#### Livestock and Product Output

#### Livestock Highlights



extent of the second-half 1991 price decline depends upon the magnitude of the production increase, consumers' reactions to high retail pork prices, and competition from large poultry supplies.

Little change in annual average lamb prices is expected in 1991 from the current rather depressed levels. Prices in 1990 averaged near \$56 per cwt, compared with \$67 a year earlier. Modest increases in consumption have reflected sharp price declines relative to beef in recent years. [John Ginzel (202) 219-1285] AO

## **Broiler Expansion** Continues

roiler production is expected to increase 5-6 percent in 1991 to around 19.5 million pounds, as growth slows in response to positive but lower net returns in 1990 and increased uncertainty. This growth follows an estimated 6- to 7-percent gain in 1990 and extends the long-run expansion that has averaged 5 percent annually since 1981.

Production increases are expected to be greatest in first-half 1991, with first- and second-quarter production estimates up 6 and 7 percent. Output increases in the second half likely will slow to around 5 percent, particularly if net returns weaken in the first half.

Growth estimates are based on a larger broiler hatching egg laying flock, and indications of a larger broiler hatchery supply flock.

#### Livestock Highlights

The expected increase in production this year, coupled with large red meat and turkey supplies, likely will push prices slightly below a year earlier. But continued favorable demand for poultry meat may partially offset the effects of the supply gain on prices.

The 12-city wholesale price is expected to average 51-57 cents per pound in 1991, down from 54-55 cents a year earlier. Prices are anticipated to follow a typical quarterly pattern, strengthening in the second and third quarter before weakening in the fourth. Slightly lower retail prices are expected and per capita consumption likely will increase about 3 pounds from nearly 70 a year earlier.

The expansion and positive returns experienced by the broiler industry in the last half of the 1980's and 1990 have provided strong incentives for continued growth. Average net returns in 1991 are estimated to be unchanged or just below 1990, because wholesale broiler prices are expected to average slightly lower white feed prices remain unchanged.

## Record U.S. Broiler Exports

U.S. broiler exports are expected to be record high in 1991, at over 1.1 billion pounds, or almost 6 percent of estimated production. Exports will benefit from relatively low prices and expected better access to major long-standing markets such as Japan, Mexico, and Canada, as well as to the new large market in the USSR. USSR purchases will be influenced by its foreign exchange reserves and the availability of credit programs.

U.S. broiler exports in 1990, valued at over \$525 million, increased 35-40 percent from a year earlier to a record of over 1 billion pounds. Growth was led by new exports to the USSR, which replaced Japan as the largest U.S. customer.

Large supplies of reasonably priced dark meat helped fuel the growth. Broiler parts represented 95 percent of the 1990 exports, with 80 percent of exports going to six countries; the USSR, Japan, Hong Kong, Mexico, Canada, and Singapore.

Although the U.S. is one of the leading poultry meat exporters, production has historically focused on the domestic market, with broiler exports averaging 4-5 percent of annual production. As the industry continues to expand, exports will become more important for both broilers and turkeys, but especially for broilers.

#### Slower Turkey Growth Expected

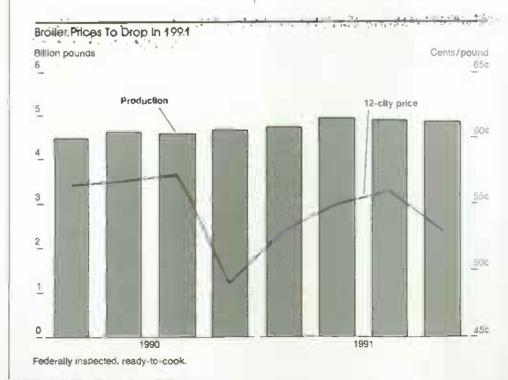
U.S. production of turkeys in 1991 is expected to be 4.8 billion pounds, 5-7 percent above a year earlier. This follows an above-average increase of 9 percent in 1990 and a doubling of output since 1980.

Improved returns in fourth-quarter 1990 encouraged expansion in 1991. First-quarter turkey production likely is increasing 5-7 percent from a year earlier, based on higher October and November poult placements. Year-to-year increases of about 6 percent are expected in both the second and third quarters, followed by a 5-percent increase in the fourth. Second-half 1991 production will grow faster than a year earlier.

Average wholesale turkey prices in 1991 are expected to remain largely unchanged from a year earlier, following a slight increase early in the year. Continued high red meat prices will help support turkey prices. Eastern region hens are expected to average 61-67 cents per pound, compared with around 64 cents in 1990. The quarterly price levels and patterns for 1991 are expected to be similar to those of 1990.

Per capita turkey consumption is expected to be over 19 pounds in 1991, up a pound from a year earlier. The year-round increase in turkey consumption is partly due to the growing availability of many convenient further-processed turkey products and consumers' health concerns. Even with increased turkey and other meat supplies, retail turkey prices are expected to remain unchanged from a year earlier, and average about \$1.00 a pound for whole turkeys.

Net returns for turkey producers in 1991 are expected to average slightly above breakeven, unchanged or slightly higher than last year, reflecting relatively unchanged feed costs.



## U.S. Egg Exports To Rise 10 Percent

Total egg production in 1991 is expected to be 5.7 billion dozen, about 1 percent above last year. Table egg production also will probably increase about 1 percent, to around 4.9 billion dozen, following a fractional rise in 1990.

The table-egg laying flock in 1991 is expected to increase only slightly, as producers expand slowly in response to the favorable net returns of the past 2 years. Producers appear to be taking a more conservative approach, perhaps because they remember the bleak period of 1987/88.

Wholesale New York egg prices are expected to average 72-78 cents per dozen in 1991, down from an estimated 82 cents in 1990. But these estimates assume no significant restrictions on movement of table eggs to market associated with salmonella enteritidis in the laying flocks.

First-quarter 1991 prices likely will average 74-80 cents, but could decline to the low 70's or high 60's in the second quarter. Prices are expected to rise to 72-78 cents in the second half. Average retail prices are forecast to decline to the midto-upper 80's in 1991 from an average of over \$1.00 from a year earlier.

Egg producers can expect positive net returns in 1991 for the third straight year. However, average returns probably will be lower than in 1990 or 1989, reflecting lower egg prices. Returns in 1991 are expected to be strongest during the first quarter, decline in the second after Easter, and then firm up in the third and fourth quarters.

Per capita consumption in 1991 is estimated to be around 233 eggs, down about one egg from a year earlier. While the long-term trend of reduced per capita consumption appears to be continuing, it has slowed during the past several years. The growth in the use of eggs in egg products is expected to continue, following a 9-percent increase in 1990 when it was about 46 eggs, almost 20 percent of per capita utilization.

U.S. egg exports are expected to increase about 10 percent to around 98 million dozen in 1991, as domestic prices ease from the relative highs of the past 2 years. The expected lower value of the dollar relative to the yen and some other currencies, coupled with exports under the EEP and sales to Canada, also will be important factors influencing 1991 exports. [Lee Christensen (202) 219-0714]

## Milk Prices To Drop Sharply

ilk prices in 1991 are expected to fall \$2-\$3 per cwt from last year. Milk output is forecast to rise, while commercial use of skim solids is expected to drop. And the milkfat surplus will shrink a bit. The underlying changes in supply and use explained only part of 1990's price movements.

Dramatic late-1990 declines in wholesale and farm prices are expected to erode retail dairy prices through most of 1991. Retail dairy prices are expected to drop 1-4 percent during 1991, depending on how brisk retail sales remain.

In March-July of last year, panic buying of nonfat dry milk and cheese caused prices to surge counterseasonally. Then, prices crashed in the summer when buyers' concerns about availability were allayed. Earlier in the year, production was below expectations and prior export commitments were large relative to supplies.

Yet despite the gyrations, the annual average milk price is estimated to have been \$13.75 per cwt, up slightly from a year earlier.

For all of 1990, retail dairy prices averaged about 9 percent above a year earlier. In contrast to the 1980's, dairy prices in 1990 rose substantially more than the price indices for all food or all consumer items.

#### Milk Output To Expand Modestly

Early 1991 output is projected to rise considerably from a year earlier due to the high milk prices of late 1989 and most of 1990. However, production increases will slow as the year progresses, because lower milk prices more recently and fairly steady concentrate feed prices are reducing the milk-feed price ratio.

The milk-feed price ratio is projected to drop from the 1.7 posted in 1990 to 1.3-1.5. These lower ratios are associated with below-trend growth in concentrate feeding and milk per cow. In addition, returns above concentrate costs could fall 25 percent from 1990's near record to the lowest since 1978.

Annual production in 1991 is projected to rise 1-2 percent, as a modest gain in milk per cow outweighs a slight decline in cow numbers. Relatively low milk-feed price ratios probably will hold milk per cow to below-trend growth.

High milk prices during second-half 1989 and most of 1990 created ample incentives for greater production.

Although milk-feed price ratios were favorable during 1990, milk output per cow did not surpass trend. Increases in concentrate feeding generally have been moderate. Nevertheless, 1990 output per cow clearly recovered from the weak levels of a year earlier.

Sharply improved returns since mid-1989 have reversed earlier declines in milk cow numbers. Although increases have been relatively small, milk cow numbers were slightly above a year carlier during the second quarter of 1990 for the first time in 5 years.

Total 1990 production is estimated to have been about 148 billion pounds, up more than 2 percent from a year earlier. Milk cow numbers were about unchanged. But milk per cow rose more than 2 percent from the weak 1989 level, although still only 3 percent above 1988.

#### Livestock Highlights

Many dairy farmers improved their financial condition in 1990 and could have expanded their operations. Average debt-asset ratios have declined considerably over the past few years and some of last year's high returns likely were available as liquid assets. However, farmers generally have been cautious about expanding and taking on new debt in recent years.

#### Commercial Use To Continue Strong

In 1991, commercial use of dairy products (milk equivalent, milkfat basis) is forecast 1-3 percent above a year earlier due to the continued recovery of creambased product sales and expected further growth in cheese use. Forecasts for the general economy support continued strong use of dairy products in 1991.

However, risks of a recession-induced weakening in consumer demand are higher than in recent years. And disappearance of skim solids in 1991 is not expected to match last year's use because of weaker disappearance of nonfat dry milk.

Strong domestic cheese demand and a recovery in butter use were the primary contributors to a more than 5-percent increase in commercial use of dairy products during the first half of 1990. Fluid milk sales ran fairly even with a year earlier and frozen yogurt sales increased sharply. But sales of other frozen dairy products and cottage cheese fell.

The second half of 1990 saw a general pattern of continued recovery in butter sales, substantial (but slower) growth in cheese use, and declining commercial use of nonfat dry milk.

For all of 1990, commercial use of dairy products is estimated to have been 140 billion pounds, milk equivalent, milkfat basis, more than 3 percent above a year earlier.

#### Milkfat Surplus To Drop

While the milk equivalent, milkfat basis, total of commercial stocks throughout 1990 was similar to that of 1989, the composition was markedly different. Butter holdings in 1989 were ample, American cheese stocks stayed low, and manufacturers' stocks of nonfat dry milk were small relative to commercial use.

But during 1990, cheese stocks increased as storers tried to replenish low stocks and butter holdings declined considerably. Also, manufacturers' stocks of nonfat dry milk started to back up when relatively high wholesale prices in early summer and signs of market weakening led buyers to cut purchases to a minimum and wait for prices to drop.

The only significant government stocks last fall were butter. As of November 1, the CCC held no uncommitted inventories of American cheese and only about 35 million pounds of nonfat dry milk.

After 2 years of buying nothing but butter under the milk price support program, the CCC has been buying nonfat dry milk since September, when market prices dropped to the support level in the West. Commercial use has not been strong enough to absorb available supplies.

For all of 1990, CCC net removals of dairy products are estimated to have been 8 billion pounds, milk equivalent, milk-fat basis, down from 9 billion a year earlier. Net removals in 1991 are expected to be slightly below the total removed this year.

Commercial use in 1991 is forecast to grow only slightly more than milk production. Butter purchases by the CCC are expected to be lower than in 1990, while more cheese and nonfat dry milk will be bought.

World prices of major dairy products have fallen considerably since the beginning of 1990, as export supplies and stocks increased in major producing nations. Sales of heavily discounted products by some East European nations have added downward pressure to world market prices. Also, world consumption of dairy products has remained stable.

World dairy product prices are expected to continue trending downward in 1991. The downtrend does not provide a bright outlook for U.S. commercial exports. [Sara D. Short (202) 219-0770]

## Upcoming Releases from USDA's Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued in February.

#### February

- 1 Egg Products
  Poultry Slaughter
  Catfish Production
- 4 Cattle Sheep & Goats
- 6 Dairy Products
- 7 Celery
- 11 Crop Production
- 12 Farm Labor
- 13 Honey Potato Stocks
- 14 Turkey Hatchery
- 15 Milk Production
- 19 Cattle on Feed
- 20 Sugar Market Statistics Cold Storage - Annual
- 21 Catfish
- 22 Cold Storage
  Eggs, Chickens, & Turkeys
  Livestock Staughter
- 27 Peanut Stocks & Processing
- 28 Agricultural Prices



## Wheat Markets Swing To A Surplus

harp swings in prices and quantities whipsa wed wheat markets over the last few years. In 1988/89 and 1989/90 uneven weather timited supplies, reduced stocks, and raised prices. As 1990/91 began, stocksto-use ratios were the lowest in decades, both in the U.S. and the rest of the world.

Then in a dramatic switch, record foreign wheat production, near-record U.S. output, and modest growth in demand combined to flood the 1990/91 wheat market. While there are many uncertainties about output in 1991/92, foreign production probably will be down slightly while U.S. output will slip more substantially.

## Record Output Pushes Up Stocks

World wheat production rose 11 percent this season compared with 1989/90. Even with consumption forecast up 6 percent, ending stocks are expected to jump 23 percent, the sharpest gain in volume

since the mid-1970's. The world stocksto-use ratio is expected to remain well below the highs of the mid-1980's, but rebound from recent drought-induced lows.

Foreign wheat output is esumated to have risen 8 percent, with the largest gains in the Soviet Union, Canada, and China. Large crops in both importing and exporting countries are the major reasons why no change in volume is forecast for world trade. Export prices have plummeted since the beginning of the marketing year, but the low prices are not stimulating the demand for imports.

Soviet wheat production in 1990/91 is estimated to have ballooned 17 percent from a year earlier to 108 million tons, reflecting record yields. While wheat area there has been falling, the decline has largely been in the lower yielding spring wheat areas. Despite the large crop, Soviet wheat imports are forecast to reach 13 million tons, only 7 percent below 1989/90.

Chronic Soviet harvest and distribution problems worsened this year. Labor, equipment, and input shortages created more problems at harvest than usual. Transportation bottlenecks slowed deliveries. Farmers continue to resist selling grain to the government, preferring to feed it to their own livestock or hold it for barter. The Soviet government claims that because foreign exchange reserves are limited, it will only buy wheat if exporters provide credit.

China's wheat output likely rose 6 percent to a record 96.5 million tons. The government encouraged farmers to plant more area to grain by increasing agricultural investment, raising procurement prices, and promising to stop using IOU's. Favorable weather led to record yields. Imports are forecast down 26 percent to 11.5 million tons.

In the U.S., the 1990/91 supply is estimated to have reached 3.3 billion bushels, up 541 million from a year earlier. But use is forecast up only 133 million bushels, which will lead directly to increased stocks and lower prices.

U.S. food use set a record in August, placing first-quarier (June-August) use at 197 million bushels, up almost 8 percent from a year earlier. Food use for all of 1990/91 is forecast up 3 percent, more than double the rate of population growth.

Feed and residual wheat disappearance is forecast to reach 450 million bushels, almost triple the 1989/90 number. Wheat prices have been low enough to make feeding wheat to livestock attractive.

#### Stiff Competition Drops U.S. Share

Excellent crops have increased exporter supplies. With world trade expected to remain unchanged in 1990/91, competitor stocks are expected to increase sharply. As a result, prices have fallen as competition for the limited market has increased.

Canada harvested a record 31.8 million tons, up 29 percent from 1989/90. Canadian exports are forecast to expand to 18 million tons and ending stocks are projected to increase to 14.6 million tons, more than double a year earlier and the sharpest increase ever.

EC wheat production is estimated to have been the second highest on record at 81 million tons, 3 percent above 1989/90. To minimize stocks, the EC aggressively marketed wheat early in the season. By November, export restitutions had nearly doubled from January 1990 levels to an average of \$156 per ton. In some cases, the restitutions were nearly twice the export price and the highest since March 1987.

Argentina's exports are forecast up 13 percent from 1989/90 to 6.8 million tons. Australia's exports are expected to be 10.5 million tons, 3 percent below 1989/90. Other exporters, such as Turkey and Saudi Arabia, likely have more to export in 1990/91.

U.S. exports in 1990/91 are forecast down 13 percent from a year earlier to 29 million tons, the lowest since 1986/87. Intense competition, the decline in Soviet and Chinese imports, and the U.N. trade embargo against Iraq are all contributing to sluggish U.S. sales.

Larger global supplies and fierce competition contributed to increased sales under the U.S. Export Enhancement Program (EEP) in the first 5 months (June-October) of the 1990/91 marketing year. EEP wheat sales were up 67 percent from the same period in 1989/90. EEP bonuses for wheat averaged \$29 per ton between the beginning of June and early November, compared with \$9.50 a year earlier. The bonuses have risen sharply since August, averaging over \$40 in September and October.

## Global Plantings To Drop in 1991/92

It is still too early to forecast world wheat production for 1991/92. However, large 1990/91 crops, prospects for a significant build-up in stocks, and sharply lower export prices are likely to discourage producers in some countries from planning wheat in 1991/92.

Still, farmers in several key growing areas, including the EC, the Soviet Union, and China, are not very responsive to world price movements. While producers in Canada, Argentina, and Australia are normally more responsive, much depends on the outlook for prices of alternative commodities.

The direct impact of low prices is minimal in the EC due to its Common Agricultural Policy. In fact, given the support price of wheat relative to other support prices, farmers have an incentive to plant wheat instead of oilseeds. Thus, despite the expected build-up in EC wheat stocks in 1990/91, more area likely will be planted to wheat in 1991/92.

In the Soviet Union, winter wheat area has stabilized and yields have been increasing. Improved farming practices, particularly increased fertilizer use, have been adopted. However, Soviet plantings of winter grains likely dropped 4 million hectares for the 1991 crop because of adverse weather at planting.

In China, early season conditions were favorable for winter wheat plantings. Government policies continued to favor grain cultivation over non-grain commercial crops, keeping area from falling significantly.

U.S. wheat prospects for 1991 point to decidedly lower production compared with the near-record 1990 crop. Area will be down, and there is no assurance that the 1990 record yield will be repeated. However, 1991/92 U.S. wheat supplies will be bolstered by much larger beginning stocks.

A higher Acreage Reduction Program (ARP) requirement, new program flexibility provisions, and prospects for stronger prices for alternative crops will ensure sharply reduced wheat seedings for the 1991 crop. Assuming the minimum ARP requirement of 15 percent for 1991, a participation rate similar to last year likely would lead to four to five times more wheat area idled under the ARP than last year's approximately 2 million acres.

The ARP is up sharply from 5 percent in 1990. Growers also had the option last season to modify contracts, accept reduced deficiency payments, and harvest up to 105 percent of wheat base.

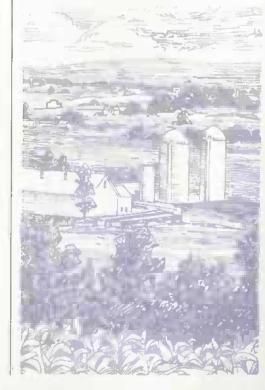
Flexibility provisions of the 1990 farm bill and budget act also are likely to reduce wheat area, especially for hard red spring wheat, where farm prices have been particularly low compared with alternative crops. Of the estimated 11.7 million acres planted to hard red spring wheat in 1990, 1-2 million acres may be planted to other crops this year under the flexibility provisions. In North Dakota, sunflowers appear much more attractive than wheat.

Harvested wheat area is likely to decline more than planted area in 1991. The low ARP, good prospective yields, and optimism about prices led farmers to harvest an unusually large portion of the planted area in 1990.

In parts of the Southern Plains, it is common to plant wheat in excess of permitted acres, with the excess used for pasture. However, the producers clip the excess to meet USDA requirements in time to certify to the local ASCS office that they are in compliance with the program requirements.

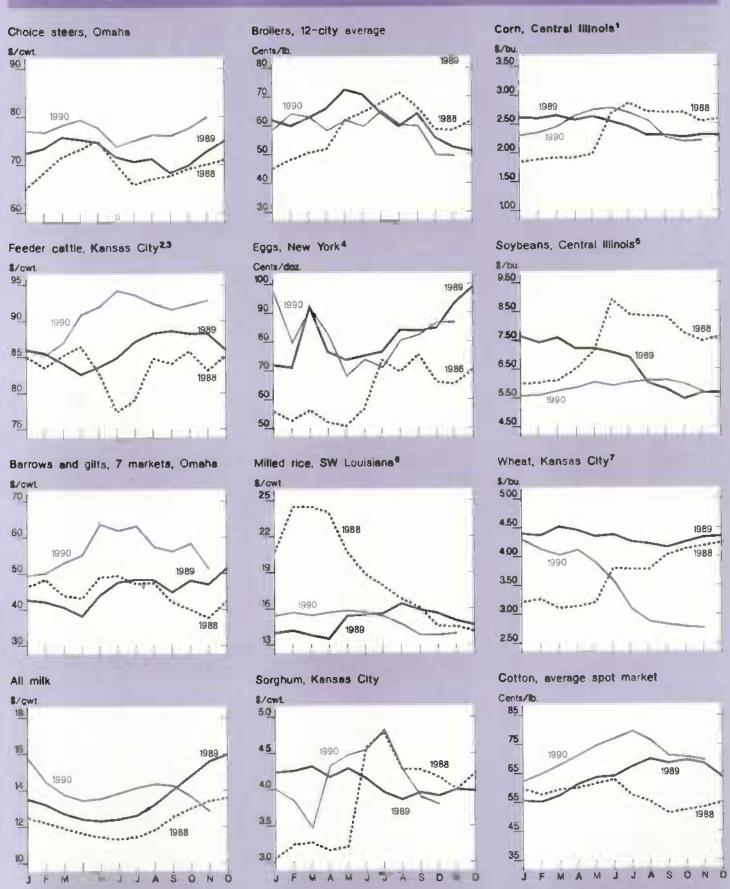
Producers who planted 1991-crop wheat last fall, (i.e., winter wheat growers) have the option of reducing deficiency-payment acres 15 percent as their normal flexible acres, or receiving a likely lower deficiency payment rate (using a 12-month season average price instead of the 5-month price).

Most winter wheat farmers probably will choose the lower payment rate. However, the flexibility provisions could affect some winter wheat producers' harvested acres depending on yield prospects and market conditions, such as cattle prices and prices of spring-planted crops. [Ed Allen (202) 219-0840 and Sara Schwartz (202) 219-0825]



#### Commodity Market Prices

#### Field Crop Highlights



## Record Rice Crops In Asia

orld rice production is forecast to reach a record 348 million tons in 1990/91, slightly above 1989/90. Consumption is projected up 4 percent to 344 million, and stocks are expected to be record high. Foreign production is projected up about 2 percent to a record 343 million tons. With normal weather, global output will remain large in 1991/92, and continue to pressure prices.

Abundant Asian crops and the U.N. trade embargo against Iraq have reduced trade prospects for calendar 1990 and 1991. World trade in 1990 is estimated to have been 12.1 million tons, down 19 percent from 1989. Trade in calendar 1991 is projected up 7 percent to 12.9 million tons. Export prices have declined from the first half of 1990 as exporters compete in a tighter world market.

## Lower Yields Reduced U.S. Rice Output

U.S. rice production in 1990/91 (August/July) likely was 154 million cwt, slightly below a year earlier. Output dropped despite a 4.5-percent increase in harvested acres caused by the lower ARP requirement. Unseasonably wet weather at harvest depressed yields slightly. Yields for 1990/91 are estimated to have declined 3 percent to 5,499 pounds per acre.

The U. S. rice supply for 1990/91 rose slightly, but exports are forecast to fall 5 percent from a year earlier to 73 million cwt. The drop reflects reduced world trade and the U.N. embargo of Iraq. Continued increases in domestic use are expected to more than offset the forecast decline in exports, causing total U.S. rice use to move up.

For the fifth straight year, U.S. production is expected to fall short of use and stocks will remain tight. Increased imports of specialty rice varieties generally not grown in the U.S. will keep stocks from falling. For the third year, carryout stocks are expected to remain close to 26 million cwt.

U.S. farm prices are expected to be \$6.25-\$7.25 per cwt in 1990/91, compared with an estimated \$7.35 in 1989/90 and \$6.83 in 1988/89. The nearby futures market turned higher in November and December, reflecting the delayed U.S. harvest as well as Brazilian purchases of U.S. rice. Reportedly lower test weights and milling rates for the U.S. crop have further tightened U.S. supplies and provide continued support for domestic prices.

#### Policy, Weather Behind Asia's Gains

Asian rice imports in calendar 1991 are projected to decline 3 percent from last year and 46 percent from 1989, because of large crops there. Favorable monsoon rains partly explain the output gains. China and India, which together account for over half of world production, are both expected to harvest record crops.

For China, 1990/91 marks the second consecutive year of record crops. Two years of exceptional weather and government policies that promoted grains helped boost output. The government raised rice procurement prices, offered cash rather than IOU's in payment, and increased its investment in agriculture. China's 1990/91 production is forecast to be 129.5 million tons, due to area and yield increases.

Despite larger supplies, China is forecast to increase its imports in calendar 1991. The imports are likely to stem from a rise in smuggling from Vietnam and government-to-government trade agreements with Thailand and Burma.

Production in India is expected to exceed the year-earlier record. Relatively high farm prices, timely access to abundant inputs, and favorable monsoon rains have led to 3 years of excellent crops after a serious drought in 1987/88.

The large crops have allowed India to boost food grain stocks to comfortable levels after the sharp drawdown in 1987/88. India is forecast to double its exports from calendar 1988 to a total of 400,000 tons of basmati and long grain white rice in 1990 and 1991.

The Philippines probably was Asia's largest importer last year, as adverse weather cut the size of its 1989/90 crop. However, crop prospects are much improved for 1990/91, despite some damage from a recent typhoon. Imports are forecast to fall 44 percent in 1991 from a year earlier. Indonesia's 1990/91 production is forecast to be only slightly below the 1989/90 record, and is once again expected to be a net exporter in 1991.

#### Exporters Face Tight Markets

Because Asian imports are projected to decline, exporters are looking to other regions. However, the U.N. trade embargo against Iraq has limited growth prospects in the Middle East. Iraq was the world's fourth largest importer in 1989 with 4 percent of global imports. It was also the largest market for U.S. rice that year, taking about 13 percent of U.S. rice exports. In 1991, total Iraqi imports are now forecast to be cut to 200,000 tons from 547,000 tons in 1989 by the trade embargo.

World trade in calendar 1991 likely will be supported by large sales to Brazil, Peru, and Mexico. Brazilian farmers reduced area in 1989/90 due to lack of credit, low prices, and uncertain economic conditions, and suffered from adverse weather. Peru's 1989/90 crop was severely affected by drought. Mexico's 1988/89 and 1989/90 rice crops also were affected by drought.

In other regions, only a small increase in African imports is projected for 1991. EC imports will be about flat.

World trade also will depend, in large part, on government policies in Vietnam and Thailand. During the last 2 years, Vietnam has aggressively marketed rice at low prices white Thailand has turned to supporting domestic farm prices and subsidizing exports. It is unclear whether these countries will continue these policies or shift to new strategies.

Thailand's 1990/91 crop is forecast down 6 percent due to adverse weather and continued problems with brown planthoppers. However, Thai exports are likely to increase 10 percent because the government holds abundant stocks.

Vietnam is forecast to produce 11.7 million tons in 1990/91, 2 percent below 1989/90. Reports indicate that reduced fertilizer supplies are adversely affecting the crop. Vietnam's primary supplier, the Soviet Union, had been providing fertilizer at subsidized rates. But this year it is cutting shipments.

Vietnam's reduced crop, continued logistical problems, and increased competition with other Asian exporters are expected to cut its exports 15 percent this calendar year. However, Vietnam is expected to remain the world's third largest exporter, shipping a forecast 1.7 million tons in 1991.

## Policy To Push U.S. Exports

U.S. exports in calendar 1990 likely slipped 9 percent from a year earlier. In addition, moderately tight U.S. supplies have kept export prices relatively high. This year, U.S. exports are projected up 8 percent to 2.4 million tons, assuming U.S. exporters are able to find new outlets to replace Iraq.

This year's export forecast also assumes that Latin American importers will turn to the U.S. for much of their needs. Location, rapid delivery, and high quality give the U.S. some advantages.

U.S. government programs will play a more important role in rice exports than in the last 2 years. Last fall, the U.S. targeted Eastern Europe for 100,000 tons of rice under the Export Enhancement Program. An increase in P.L. 480 rice allocations also will help support the U.S. rice market.

The GSM export credit guarantee program has been very important to U.S. rice exports. However, in past years, 85 percent of GSM credit for rice has gone to Iraq. As of October 14, 1990, GSM allocations for rice in this fiscal year amounted to \$41 million, and mostly went to Mexico, Hungary, and Morocco. Further allocations are expected. [Ed Allen (202) 219-0840 and Sara Schwartz (202) 219-0825]

## Coarse Grain Output To Trail Use

orld coarse grain production in 1990/91 is forecast to rise 2.5 percent from a year earlier to 820 million tons, the highest in 4

years. The largest increases probably occurred in the Soviet Union, the U.S., and China.

Meanwhile, world consumption of coarse grains is expected to drop marginally, posting the first year-to-year decline since 1985/86. However, production will still trail use, reducing world stocks for the fourth consecutive year.

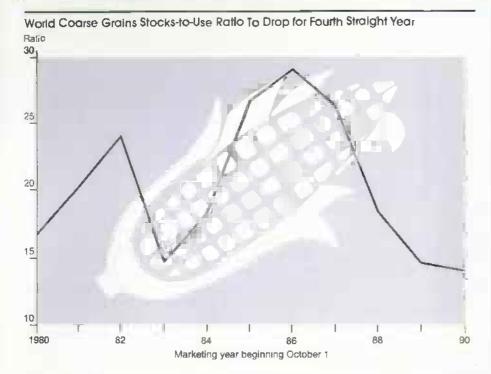
Foreign coarse grain production is forecast to rise 2 percent from a year ago to a record 590 million tons. Although much of the Northern Hemisphere experienced a favorable growing season, a wide swath of Southern Europe had an extended period of dryness which cut production of spring-planted crops. Output in Eastern Europe and the EC likely declined 10.5 and 5.6 percent, mostly due to lower corn production.

Soviet coarse grain output is estimated to have increased 8.8 percent in 1990, a near record, despite some problems with the corn crop. Harvest and marketing losses were large. While the state's procurement of grain from Soviet producers is up from a year earlier, it remains well below target. This suggests continued large import needs, although economic problems are limiting Soviet imports.

### U.S. Corn Supply Stipped More Than Use, So Ending Stocks Are Expected To Drop

Items	1989/90 estimate	1990/91 forecast	Changes from prior year
	Million	bushels	Percent
Beginning stocks	1,930	1,344	-30
Production	7.527	7,935	+5
Total supply 1/	9.460	9,281	-2
Feed and residual Food, seed, and	4,458	4,700	+5
industrial use	1,290	1,330	+3
Total domestic use	5,748	6,020	+5
Exports	2,367	2,025	-14
Total use	8,115	8,045	-1
Ending stocks	1,344	1,236	-8
	\$100	ishel	
Avg. market price	2.36	2.20-2.50	-7 to +6
Loan rate	1.65	1.57	-5
			Percentage
	Per	cent	points
Stocks/total use	16.6	15.4	-1.2

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In 1991/92, U.S. com output may rise 2-6 percent with favorable weather and the new flexibility provisions of the farm bill.

#### Coarse Grain Trade To Drop One-Tenth

World trade, forecast at 89 million tons for 1990/91, is expected to decline around 11 million from the unusually strong volume a year earlier. The anticipated reduction largely stems from an expected one-third drop in Soviet imports and sluggish demand by several other importing countries.

The U.S. share of coarse grain trade will probably decline slightly to about 67 percent in 1990/91 from 69 percent a year ago. The 1989/90 market share was surpassed only in 1979/80. The loss in share will be sharpest for sorghum and barley, while corn's share is expected to remain about the same.

A number of changes in exportable supplies are projected among the competing coarse grain exporters, but the changes largely offset each other. The biggest year-to-year gain in exports is expected in China's corn sales, followed by smaller gains for Argentina's corn sales and Canada's barley sales. A substantial fall in EC corn exports is likely to more than outweigh a small increase in its barley exports due to a sharply smaller crop in France. Lower production is expected to curtail corn exports from South Africa and Thailand. Higher domestic use and a decline in production probably will trim Australia's barley shipments.

Plentiful world wheat supplies and large export subsidies have pushed export prices to levels where wheat can compete favorably with coarse grains as a livestock feed. However, large amounts of "feed" quality wheat are not available.

## U.S. Ending Stocks Lowest Since 1976/77

U.S. feed grain harvested area in 1990 is estimated to have dropped 1.6 million acres from a year earlier. Corn harvested area probably rose 1.9 million acres, while the combined harvested area for sorghum, barley, and oats likely dropped 3.5 million acres.

Higher yields more than offset lower harvested area, resulting in an estimated 4percent increase in production. Corn yields rose about 2 percent while gains in sorghum, barley, and oats yields ranged from 9 to 14 percent. Even with the larger production, total feed grain supplies are down 4 percent from a year ago because of a 31-percent decline in beginning stocks. Supplies are down for each feed grain except oats.

U.S. feed grain disappearance in 1990/91 is expected to decline about 2 percent from a year earlier to 238 million tons. Feed and residual use is forecast up 4 percent to a little over 139 million tons. Food, seed, and industrial use probably will total almost 40 million tons, up 3 percent. Exports are expected to decline 16 percent, more than offsetting the increase in domestic use.

Ending stocks are forecast to decline to 39 million tons, the lowest since 1976/77. The ending stocks-to-use ratio would be 16.4 percent, the lowest since 1975/76.

U.S. com production in 1990 is estimated to have been a little over 400 million bushels greater than a year earlier. However, supplies in 1990/91 are estimated to be almost 180 million bushels lower because beginning stocks were down 586 million. Corn yields, estimated at 119 bushels per acre, were up 2.8 bushels from a year earlier, but below the record 119.8 in 1987.

Corn feed and residual use is expected to be 4,700 million bushels, up about 5 percent from a year earlier due to continued profitability in the livestock sector. While favorably priced wheat is expected to substitute for some feed grains, the bulk of the substitution likely occurred in summer 1990 or the last quarter of the 1989/90 corn marketing year.

Food, seed, and industrial use is expected to increase 2.3 percent in 1990/91 from a year earlier to 1,320 million bushels. Most of the gains continue to be in wet milled products, with the largest increases in the production of high fructose corn syrup and alcohol.

Exports are expected to decline to 2,025 million bushels in 1990/91, following 4 years of increases because of a 15-percent decline in world corn trade. The U.S. share of world corn trade is expected to remain virtually unchanged.

U.S. com ending stocks in 1990/91 are forecast to drop to 1,236 million bushels, continuing the pattern of the last 4 years and the lowest since 1983/84. The stocks-to-use ratio is forecast to be 15.7 percent, also the lowest since 1983/84. Market prices are expected to average \$2.20-\$2.50 per bushel, comparable to \$2.36 in 1989/90.

#### 1990 Farm Bill Offers Flexibility

The new farm legislation (see the December AO) offers new planting flexibility options to 1991 feed grain program participants. Farmers will be able to plant almost any crop on up to 25 percent of the their base acres. The first 15 percent, referred to as normal flex acres, are not eligible for deficiency payments, regardless of the crop planted.

Analysis of the potential impact of the new legislation on corn planting focuses on the corn-soybean breakeven price relationships, because in much of the Midwest, soybeans compete with corn for the same acreage. Research shows that the breakeven soybean price with a corn price of \$2.40 in Illinois would be \$5.79. Soybean prices are expected to average \$5.25 to \$6.25 for 1990/91.

The 1991 corn Acreage Reduction Program (ARP) requirement may not be less than 7.5 percent. Assuming the minimum ARP level and little net shift in complanting because of the flexibility provisions, 1991 corn area would be expected to be 1-3 million acres above a year earlier.

Yield gains similar to the long term trend increases of 1.5-2 bushels per acre would put 1991 production 200-500 million bushels above this year's 7,935 million,

Year-to-year production gains near the bottom of the range would largely be offset by the forecast reduction in 1990/91 carryout stocks. However, an increase near the top end of the range would allow for a substantial increase in use. [Philip W. Sronce (202) 447-4418 and Larry Van Meir (202) 219-0840]

## Oilseed Outlook Uncertain

The outlook for oilseeds in 1990/91 is for demand to grow slightly faster than supply. And, the increases in production will mostly be in rapesced and cottonseed while soybean production ebbs.

Although U.S. soybean acreage declined during most of the 1980's, acreage in South America increased. But South America, particularly Brazil, may now be approaching stable production. Brazil's policy of promoting soybean production has proven too expensive to continue.

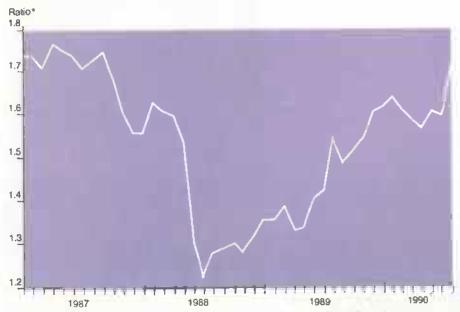
Meanwhile, U.S. policy changes probably will boost oilseed production in 1991/92, although the effect on soybeans is likely to be slight, at least this year.

In the EC, slower demand growth and gains in domestically produced oilseeds will reduce the need for greater imports. Demand growth is likely to be more rapid in China, the Soviet Union, and some Southeast Asian nations in the 1990's. But production in these regions is expected to climb as well. At the same time, some countries and regions, particularly Eastern Europe, probably will experience little or no demand growth in 1990/91 and beyond.

And while there is the potential for demand growth in the Soviet Union, actual imports are uncertain in light of that nation's financial circumstances. Another major concern is the impact of the December suspension of the Uruguay Round of the GATT negotiations.

Throughout the 1980's, U.S. oilseed acreage declined from 1979's peak of over 70 million acres to under 58 million in 1990. The impact was mostly felt in the Southeast and Delta states where lower prices, production difficulties, and substantially lower yields discouraged production.

#### Feed-Livestock Profitability Approaches Record High



\*Index of prices received for livestock products divided by the index of prices paid for feeds.

The decline in the relative importance of the southern regions suggests that average or slightly better than average yields in the six Corn Belt states will largely determine U.S. production regardless of events elsewhere. This is essentially what happened in 1990.

## Modest Growth In Demand

Although world demand for oilseed products is expected to grow modestly in 1990/91, it will rise slightly faster than supply. Consumption of protein meals is forecast to rise 3.2 percent from a year ago, up from an annual average of less than 1 percent for 1987-1989.

Soybean meal consumption is expected to climb 2 percent from a year earlier, ahead of the 1-percent annual average decline for 1987-89. China, India, the Philippines, and the Soviet Union are expected to post the largest increases in protein meal consumption.

The Soviets have provided the major growth to this import market. Although protein use in the EC during 1990 probably was a record, domestically produced sunflower and rapeseed meals limited growth in imports.

The outlook in the U.S. for oilseeds and products in 1990/91 is for another year of strong demand with supplies changing very little. Domestic soybean meal use is forecast to be 23 million short tons, up 1 percent from a year earlier, partly due to near record feed-livestock profitability, as measured by prices received for livestock products compared with prices paid for feeds.

While prices received by farmers for pork and poultry (the major users of soybean meal) could decline in 1990/91 from a year earlier, they will still be high enough compared with feedstuff prices to insure profits.

#### Vegetable Oil Stocks To Rise

In contrast to protein meals, world vegetable oil production in 1990/91 is expected to grow more than consumption. Consumption probably will rise less than 1 percent while total world vegetable oil production is expected to climb 3 percent.

The decline in world soybean output implies the availability of soybean oil will increase only slightly and lag consumption growth in 1990/91. The rise in vegetable oil production is due to gains in palm, rapeseed, and cottonseed oils.

U.S. edible oil use in 1990/91 is expected to increase about 1-2 percent after surging 5.5 percent last season. Soybean oil consumption is expected to total 12 billion pounds, little changed from a year earlier. Supplies will be tighter largely because 1990/91 beginning stocks, at 1.3 billion pounds, dropped from over 2 billion in 1988/89.

World trade in vegetable oils in 1990/91 is expected to remain virtually unchanged from a year earlier. A 3.7-million-metric-ton trade volume in soybean oil will be the lowest since 1985/86. Countering this is a sharp rise in rape-seed and coconut oil trade. In fact, consumption of rapeseed oil is expected to jump 9 percent.

China, Pakistan, and the Soviet Union are the chief importers of vegetable oils. China's imports are forecast down significantly in 1990/91, mainly because of an 18-percent rise in domestic production. Soviet increases are expected, but they will be smaller than the gains of the last 2 years.

World soybean oil trade in 1990/91 is expected to be the smallest since 1985/86. Smaller U.S. and South American supplies will curtail export activity. And rising soybean oil production in importing countries such as China and India contribute to a lowered trade outlook.

#### Little Shift To Soybeans Expected

The 1990 farm bill contains several important provisions for oilseed production. Most critical for soybeans is the 15-percent normal flex acres that will immediately make some program acreage responsive to the price of soybeans relative to the price of wheat and corn. No matter what crops are planted on these acres, farmers cannot receive deficiency payments for them.

However, the recent weakening of soybean prices makes beans less attractive than corn. Uncertainty about foreign demand, particularly in the Soviet Union, and likely drops in South American production could alter prices and the production outlook by this spring. However, at this point, any shift to soybeans from corn on the new flexible acres will be quite minimal.

In spring wheat areas, soybeans probably will be more attractive than wheat. Soybeans likely are more appealing than barley and oats at current market prices. More soybean acreage in the Dakotas and Minnesota would be the result. Soybean acreage in 1991 is expected to surpass last year's plantings by 1-1.5 million acres.

By 1992, all program provisions will be in place and relative market prices will have a greater impact on acreage allocations. With wheat prices projected low, soybean, canola, and sunflowerseed acreage could be higher, especially in winter wheat areas.

Yet, barring a surge in foreign demand, and depending on South American plantings, prices for all oilseeds could be lower in 1991/92.

The new oilseed program calls for setting an adjusted world price for loan repayment to minimize forfeitures and CCC stocks. And budgetary considerations will be a restraint. The new program clearly removes any price floor for foreign producers.

The 1990 farm bill contains provisions that can benefit producers of so-called minor oilseeds, such as canola and sunflowers. A loan rate of no less than 8.9 cents a pound and the provision allowing oilseed (soybeans excluded) production on 0-92 acreage probably will encourage sunflowerseed and canola production on some wheat base acreage. [Roger Hoskin (202) 219-0840]

## Output Gains Ahead For Cotton

The U.S. cotton industry grew strongly in the 1980's. And while domestic mill use and exports in 1990/91 are slipping from the highs of the last few seasons, the pause will be brief. Continued consumer preference for cotton products and the market-oriented provisions of the 1990 farm bill are expected to boost U.S. cotton output and use to 20 million bales annually by the year 2000.

By the end of the decade, world cotton production and consumption are projected to reach 100-115 million bales, with slightly more production than consumption growth. Both U.S. and world stocks are expected to recover from their current extremely low levels.

#### Markets Still Tight

U.S. mill use of cotton is forecast to be 8.4 million bales, down nearly 400,000 from last season. U.S. exports are projected to be 7.5 million bales, down about 200,000. Both are being held down by tighter supplies in 1990/91.

U.S. cotton production is estimated to have jumped to 15.4 million bales, 26 percent above a year earlier. However, much lower beginning stocks (3.0 million bales versus 7.1 million in 1989/90) are more than offsetting the larger crop. So, total supply is 5 percent lower.

Country	1987/88	1988/89	1989/90	1990/91 1/
		Pe	rcent	
Japan	46	40	51	48
Korea	74	61	70	60
Taiwan	26	14	28	20
Hong Kong	7	8	21	17
lialy	29	16	32	32
France	9	1	6	5
Germany	39	24	36	26
Portugal	7	3	6	6
Indonesia	33	28	40	33
Thailand	28	14	29	23
China	0	69	36	65
World	28	24	32	30

Along with the tighter supply, U.S. mill use is being constrained by increasing cotton textile imports, competitive polyester prices, and concern over the health of the general economy. U.S. cotton exports also are being held down by intense competition from domestic mills for available cotton and a much larger foreign crop.

Based on estimates of production, mill use, and exports, U.S. ending stocks in 1990/91 are projected to be 2.6 million bales, 400,000 below last season. Ending stocks probably will fall to 16 percent of use, the lowest in 40 years.

Foreign cotton production in 1990/91 is estimated up 6 percent from last season to 71.8 million bales, the second largest ever. More yield growth (4 percent) than area growth (2 percent) is likely. Larger production is expected among all major foreign producers—India, Pakistan, the Soviet Union, and China.

Foreign cotton consumption is projected at 78 million bales, just under last season's record. However, some gains are expected in Pakistan, India, and Brazil. Much of the drop in consumption is expected to occur in Eastern Europe.

With a larger foreign crop, the U.S. share of world cotton trade is expected to fall from 32 percent in 1989/90 to a more average 30 percent. The U.S. export share is expected to fall virtually across the board, except for China.

## Policy, Prices To Boost Output

In 1991/92, the basic cotton provisions of the 1990 farm bill are likely to lift plantings. Specifically, the mandate to set the Acreage Reduction Program (ARP) requirement so that ending stocks are 30 percent of prospective use likely will mean a lower ARP than 1990's 12.5 percent. Production is expected to be correspondingly larger.

In addition, the planting flexibility provisions, designed to allow farmers to follow market signals, are likely to boost cotton plantings. Plantings in 1991/92 could be 12-16 million acres. Use is expected to be 14-17 million bales, and ending stocks could rise 1.5-2.5 million bales.

Foreign output in 1991/92 is likely to increase in response to continued low stocks-to-use ratios. Again, yields are expected to rise more than area. Foreign area expansion is limited by the high cost of additional irrigation. India, Pakistan, Southern Hemisphere producers, and the French-speaking countries of West Africa are most likely to raise output.

Consumption in 1991/92 is expected to increase in India and Pakistan because those countries are focusing on increased textile exports. Consumption likely will fall again in Eastern Europe.

## Bright Decade Ahead

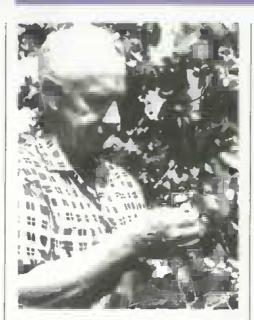
World cotton supply and demand in the 1990's will continue to be pulled up by population and economic growth. Both area and yield gains will support the output growth. Foreign area is projected to rise gradually as a major new irrigation project is completed in Turkey. Yield growth is expected to approximate its 3-percent annual average of the last 15 years. Producers in the Southern Hemisphere and the French-speaking countries of West Africa are likely to continue expanding output.

In the U.S., cotton output and use will rise because consumers will continue to express a preference for cotton products. The new planting flexibility provisions will expand acreage given the strong outlook for prices.

The industry likely will continue to benefit from highly effective—and better funded—cotton promotion and research efforts in the 1990's. The farm bill also allows for increased contributions for promotions from domestic cotton producers, while providing for assessments on foreign imports to assist with market expansion. [Scott Sanford (202) 219-0840] and Carol Whitton (202) 219-0826]



#### Specialty Crop Highlights



## Global Sugar Output Catches Up

orld sugar production has caught up with consumption and stocks have stabilized, according to revised estimates for 1989/90. Output and use are forecast to grow in tandem during 1990/91. But this turnaround follows 4 consecutive years when world consumption outstripped production, shrinking stocks to very low levels.

Global ending stocks for 1990/91 are forecast to be 17 percent of consumption, similar to last season and well below the 1980's average of 24 percent.

In April 1990, the world sugar price briefly reached a high of 16 cents per pound, but then dropped sharply to 9-10 cents after it became clear that world output was sufficient to cover demand at lower prices. The continued tight supply situation, however, should keep prices from dipping much below their current level.

Global output in 1990/91 is expected to reach a record 109.9 million tons, raw value, up 1.6 percent from last season. Nearly 20 million hectares of sugar crops will be harvested, comprised of 11.2 million hectares of sugarcane and 8.6 million of sugarbeets. Favorable weather in major beet- and cane-producing countries got the year off to a good start.

Increased domestic prices have spurred planting and should result in output gains in several key countries. Strong world prices that prevailed for most of 1989/90 also have been factored into this upward trend, encouraging some growers in exporting countries to expand area.

#### Soviet Crop To Shrink

USDA expects the most significant production advances to occur in the EC, India, and China. EC output should be up 3.9 percent to a record 15.9 million tons. India's production is expected to rise nearly 7 percent in response to favorable weather and stronger price incentives. China's output is also expected to advance 5.3 percent to a record 6.0 million tons, due to stronger incentives offered by the government.

In contrast, the Soviet Union, the world's largest importer, is expected to have a smaller crop. And Cuba, the world's largest sugar exporter, is also expected to produce less.

Australia's production is forecast to be down due to dry weather in the sugarcane areas in Queensland. Brazil's outturn is expected to be lower due to lack of government price incentives and a government policy that favors the production of fuel-alcohol from sugarcane over sugar.

World output in 1989/90 was 108.3 million tons, up 2.5 percent from USDA's initial estimate, due primarily to greater-than-expected output in India, China, and Brazil.

India's production was boosted by favorable weather and high domestic prices. Cuba's sugar producers overcame transportation problems and unfavorable weather during harvest to keep output near a year earlier. Higher cane yields and diversion of cane from fuel alcohol to sugar production explain the upward revisions in the Chinese and Brazilian estimates.

Global sugar consumption in 1990/91 is forecast to reach 110.3 million tons, up nearly 1.7 percent from a year earlier. Over the past 20 years, global sugar consumption has grown an average 2 percent per year, in tandem with population growth.

Sugar consumption is forecast higher in each of the world's four most populous developing countries, China, India, Indonesia, and Brazil. Together, they account for nearly 29 million tons, or about 26 percent of global use, compared with 19 million tons and 21 percent of global use a decade ago.

In addition, enhanced revenue from oil should give less developed petroleum-exporting countries the wherewithal to increase consumption through larger sugar imports. Yet, consumption in many other less developed countries that import sugar likely will be hampered by foreign currency constraints that are tighter because of higher oil prices.

For most of Eastern and Western Europe, consumption is expected to be stable or somewhat higher. Sugar use in the Soviet Union, the world's largest consumer, is likely to increase somewhat in spite of rationing because of a drawdown in internal stocks.

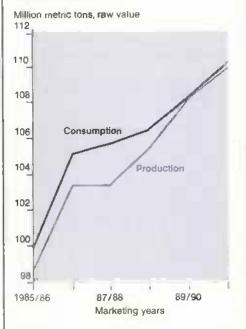
#### Trade Remains Flat

World sugar trade remains relatively stable at 28 to 29 million tons, similar to the 1980's. This partly reflects slow economic growth in developing countries and their import substitution programs. And the industrialized consuming economies have reached sweetness saturation levels, while corn sweeteners and new high-intensity and low-calorie sweeteners have displaced sugar. World exports in 1990/91 are expected to be down more than 1 million tons from a year earlier. Production problems experienced by some of the world's major exporters, and lower prices compared to last year, are behind the expected drop. The world's five leading exporters, the EC, Cuba, Thailand, Australia, and Brazil, are expected to supply about 70 percent of the total.

Reduced shipments from Brazil and Cuba should account for a significant portion of the drop in 1990/91 exports. Brazilian policymakers are likely to give precedence to meeting domestic demand for sugar and fuel alcohol over sales on the world market. Exports are forecast to be the lowest since 1964. Lower Cuban exports will reflect its smaller crop.

Global imports for 1990/91 are expected to be down slightly from the previous year. Increased production in a few key importers, foreign currency constraints, and the effects of the Gulf crisis help explain the decline. Booming production in India is expected to make imports unnecessary for 1990/91. East European purchases are forecast to shrink by about one-quarter, largely because of economic austerity programs and declines in local processing activities.

World Sugar Production Catches Up With Consumption



Soviet imports are forecast to be down some what at 4.5 million tons, 16 percent of the world total. However, China is expected to nearly double imports to around 2 million tons in order to replenish stocks and to take advantage of lower world prices.

#### U.S. Sugar Quota Jumps 11 Percent

U.S. sugar production for fiscal 1991 is estimated to have been 6.5 million short tons, raw value, comprised of 3.7 million tons of beet sugar and 2.8 million tons of cane sugar. This was the third straight season of decline. Drought in the Red River Valley of North Dakota and Minnesota, last December's freeze on Louisiana cane fields, and reduced acreage in California and Hawaii have all taken their toll.

U.S. sugar use in 1990/91 is forecast to increase 1 percent to 8.6 million tons, the fifth straight year of rising consumption and the highest since 1982/83. For perspective, U.S. sugar consumption peaked in 1976/77 at over 11 million tons. Then consumption declined for 9 years, as high-fructose corn syrup replaced sugar in soft drinks and in some other uses.

Sugar consumption bottomed out at 7.8 million tons in 1985/86, and has risen steadily since, as nonbeverage uses have continued to grow.

The markets for two of the primary industrial uses of sugar, bakery and cereal products, and confectionery, have been especially strong. According to industry sources, confectionery sales soared during the past 12 months, with chocolate confectionery up 12.5 percent and sugar confectionery up 8 percent. Confectionery appears to be the driving force behind the rise in sugar deliveries. Lower cocoa prices have allowed for lower candy prices.

Owing to higher consumption, lower production, and lower beginning stocks, the Secretary of Agriculture on November 30 increased the amount of sugar eligible for entry under the lower duty in 1990/91. The amount rose by 413,467 short tons (375,000 metric tons) to 2,315

million short tons (2.100 million metric tons). This year's new quota represents an 11-percent gain from fiscal 1990 and is the highest since 1983/84. The new quota amount was effective December 3. [Peter Buzzanell (202) 219-0886] AO

### Fruit and Tree Nuts Outlook Mixed

California's agricultural areas suffered a devastating freeze in late December that destroyed much of the orange crop and damaged lemons, artichokes, broccoli, celery, cauliflower, and lettuce. Since most oranges for the fresh market are produced in California, prices are expected to rise as a result of the freeze. The following article reflects forecasts made before the freeze.—Ed.

supplies of many U.S. noncitrus fruits are expected to be smaller in 1990/91 while the citrus crop is likely to be the largest in 6 years. Relatively smaller domestic fruit supplies and higher domestic prices dampened U.S. per capita fruit consumption in 1990. But tree nut consumption probably was higher than a year earlier in response to record stocks and generally lower prices.

During fourth-quarter 1990, lower retail prices for oranges and grapefruit placed downward pressure on retail prices for all fresh fruit as measured by the Bureau of Labor Statistics' Consumer Price Index. Fresh fruit prices will remain down through first-quarter 1991.

However, for all of 1991 higher marketing costs and other inflationary pressures are expected to raise the price index for all fresh fruit above a year earlier.

#### Citrus Crop Largest in 6 Years

USDA's first forecast for the 1990/91 U.S. citrus crop released in October

placed total output (excluding grapefruit in California's "other areas") at 13.5 million short tons, up 26 percent from a year earlier. The forecast reflects expectations of increased production of all citrus commodities in Florida, the largest producing state, following the damaging December 1989 freeze.

Prospects for the 1990/91 orange crop point toward larger domestic supplies of processing oranges, but smaller fresh market supplies. The Florida orange crop, of which over 90 percent is usually processed, is forecast to be 7.4 million short tons. If realized, the crop will be up 50 percent from a year earlier and 13 percent above 1988/89.

Growers in California and Arizona are expected to have a mixed season with a smaller orange crop offsetting larger grapefruit and lemon crops. Texas is not expected to harvest a commercial citrus crop in 1990/91 because of the severe damage to orange and grapefruit trees from the December 1989 freeze.

Florida's improved orange crop prospects and forecast higher juice yields are expected to result in a larger domestic orange juice pack in 1990/91. The larger pack will ease the tight inventories and record-high wholesale and retail prices for frozen concentrated, chilled, and canned orange juices that prevailed during most of 1990, and will also reduce U.S. import requirements.

World prices for frozen concentrated orange juice (FCOJ) have been dropping in response to the forecast larger 1990/91 Florida orange crop and expectations by private traders for a record 1991/92

orange crop in Brazil, the largest supplier of imported FCOJ to U.S. markets. U.S. FCOJ imports are expected to decline in 1990/91 because of larger domestic juice supplies and lower domestic prices.

The larger Florida and Arizona orange crops expected in 1990/91 will help off-set smaller California production and keep downward pressure on fresh market orange prices. This will limit prospects for appreciably higher prices for California growers despite the state's smaller crop.

## Grapefruit & Lemon Crops Expected Up

The 1990/91 U.S. grapefruit crop, excluding production in California's "other areas," is forecast to be 2.3 million short tons, 31 percent larger than a year earlier, yet 13 percent smaller than in 1988/89. Larger crops are expected in Florida, the California desert region, and Arizona. USDA does not expect Texas growers to harvest a commercial crop this season.

Even though fresh market grapefruit prices are expected to range lower this season, Florida growers are likely to achieve higher returns than a year earlier with the increase in available supplies. Conversely, California and Arizona growers who received record prices a year earlier are expected to see lower returns in 1990/91 as Florida re-enters the market. The increase in fresh market and processing grapefruit supplies should keep retail prices lower through the winter.

#### U.S. Cherry and Prune Output Nosedived

Commodity	1003	4000	4000	4000	Change from
	1987	1988	1989	1990	1989
		1,000 :	short tons		Percent
Apples	6,371	4,566	4,983	4,736	-5
Apricots	114	102	117	122	4
Cherries	395	304	332	234	-30
Grapes	5.267	6,034	5,931	5,461	-8
Nectarines	191	200	200	205	3
Peaches	1,191	1,307	1,167	1,061	-9
Pears	939	861	917	939	2
Prunes/plums	977	738	1,012	702	-31
Strawberries	559	590	532	563	6
Total	15,004	14,702	15,191	14.023	-8

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Heavier domestic lemon supplies since August have put downward pressure on grower prices this season, particularly for fresh market lemons. But on-tree prices for processing lemons are much improved in California and Arizona, reflecting strong demand. Consequently, a slightly larger portion of the crop is expected to move into the processing market, in contrast to a larger share for the fresh market over the past four seasons.

Production of the key noncitrus fruits (including the major tree fruits, grapes, and strawberries) in 1990/91 is expected to decline 8 percent from a year earlier, to about 14 million short tons. Adverse weather last spring lowered production prospects in some areas of the country.

The decline in total noncitrus production stems primarily from smaller apple, sweet and tart cherry, grape, peach, and prune and plum production, which offset relatively larger crops of apricots, nectarines, pears, and strawberries. Consequently, prices for most noncitrus fruits are above last year.

But, prospects point toward record imports of Chilean noncitrus fruits this winter, which should lead to ample supplies in U.S. markets through the spring.

#### Record Tree Nut Supplies Again

In spite of smaller production for most U.S. tree nut crops (almonds, walnuts, pecans, pistachios, hazelnuts, and macadamias) in 1989, domestic supply of all tree nuts, including imports, reached an estimated record 1.34 billion pounds (shelled basis) during 1989/90, up 5 percent from a year earlier. As a result, grower cash receipts fell 11 percent from 1987's record \$1.13 billion.

The outlook for 1990/91 is much the same, as large beginning stocks and above-normal production of most tree nut crops are expected to lead to record supplies. For 1990, the marketable quan-

tity of all U.S. tree nuts came to a record 1.5 billion pounds (shelled basis), up 11 percent from a year earlier. Of the six major U.S. tree nuts, only pecans are in tighter supply than a year ago.

However, these abundant supplies are available at a time when foreign supplies, especially Turkish hazelnuts and Spanish almonds, are lower. Consequently, U.S. domestic tree nut use and exports are expected to break records in 1990/91. [Katharine C. Buckley (202) 219-0884]

## Vegetables Gain Popularity

he outlook is bright for the U.S. vegetable industry. An estimated record production of fresh and processing vegetables in 1990, following above-trend output throughout the 1980's, illustrates the gathering strength of the industry and the continuing increase in consumer demand.

Greater supplies and lower grower prices than a year earlier are projected for 1990/91. In 1990, vegetable production is estimated to have exceeded a 15-year trend (1975-89) for the second straight year, largely because of record large processing tomato and fresh onion crops, a near-record dry bean crop, and larger fall potato and sweet potato crops.

Output of the four major processing vegetables (green peas, green beans, sweet corn, and tomatoes) in 1990 is expected to have increased 10 percent from a year earlier to 15.5 million tons, with tomatoes accounting for two-thirds of the total. Demand from new U.S. processing facilities, primarily in California, was a driving force for the larger tomato crop.

Vegetable consumption should **continue** to expand during the 1990's. Gains in population growth, rising incomes, and changing preferences can be expected. Scientific studies continue to support the view that vegetables are critical in maintaining and promoting health.

Domestic consumption of fresh vegetables likely rose in 1990. In 1989, U.S. consumption of fresh vegetables increased 3 percent from a year earlier to 102 pounds per person, with lettuce, broccoli, and sweet corn showing the biggest gains. Per capita consumption of french fries, chips, and other processed potatoes increased 2 percent to 76 pounds.

#### Retail Prices To Rise

Although 1990/91 grower prices for fresh vegetables, potatoes, and dry beans are expected to be lower than a year earlier, retail prices likely will be higher in 1991 as hikes in fuel prices drive up transportation costs. In the Northeast, for example, transportation charges have averaged 16 percent of the retail cost for California iceberg lettuce and 6 percent for Florida tomatoes over the last 5 years.

Fewer acres were planted to fresh vegetables last fall, contributing to the higher expected retail prices in 1991. The Consumer Price Index for both canned and frozen vegetables in 1990 probably averaged 1-3 percent above a year earlier despite larger output of processing vegetables.

Relatively strong potato and dry bean prices during 1989 encouraged increased acreage in 1990. Despite continued severe drought in the Red River Valley of North Dakota and Minnesota and a blistering heat wave in the Northwest, expanded acreage boosted the 1990 potato crop 6 percent above a year earlier to 370.4 million cwt.

Dry bean output probably approached a near record 32.6 million cwt in 1990, up 38 percent from 1989 and slightly below the 1981 record when exports were at their peak. Output of pinto, navy, great northern, and red kidney beans—the top four classes—rose in 1990. Production of other beans, including black beans and blackeye beans, also increased.

The larger 1990/91 potato crop may result in grower prices slightly below a year ago, but strong processing demand and increased shrinkage in part of the fall crop will prevent prices from falling significantly below a year earlier. With potato growers on the verge of a third consecutive year of relatively strong prices, acreage in 1991 may remain near a year earlier. If yields improve, this year's potato output likely will go up.

Frozen french fry and potato chip exports in 1990 rose substantially from a year ago, offsetting a decline of about one-tenth in fresh exports. While the bulk of the U.S. potato crop is produced for domestic consumption, almost a third of the dry bean crop is grown for export.

Dry bean exports are expected to have been up about 10 percent from a year earlier in 1990. Sales of great northern and navy beans were up from a year ago, white pinto beans fell about one-third. The U.K. remains the major foreign market, followed by Japan, France, and Algeria.

## Many Niche Markets Will Expand

Although the market for specialty vegetables and herbs is small, it is expanding more rapidly than the rest of the industry. Supplies, including imports, of specialty vegetables in 1990 were up 12-15 percent from a year earlier.

The market for specialties will continue to grow during the 1990's as the appeal of unusual produce grows and the population of various ethnic groups increases. Prices for some of these high-cost vegetables may come down as the number of growers increases, and as growers and retailers develop new production and marketing technologies.

In contrast, the market for organic produce has grown dramatically during the past decade, but there are significant obstacles that could slow growth during the 1990's. Consumers using high-volume retail outlets may be unwilling to pay the substantial price premiums associated with organic produce.

Organic wholesale prices for iceberg lettuce, russet potatoes, carrots, and tomatoes were more than double the corresponding non-organic prices in the Los Angeles terminal market, according to a recent issue of the industry's weekly Organic Wholesale Market Report.

## Pesticide Availability Is Key Factor

The outcome of the public debate on pesticide use in agriculture may have more influence on vegetable production in the 1990's than any other issue. The continued availability of pesticides to vegetable growers is far from certain. The influence of consumer and environmental groups, as seen with the passage of measures on sustainable agriculture and organic certification in the 1990 farm bill, is likely to continue growing.

Although there is little data available on pesticide use in the vegetable industry at this time, it appears that U.S. vegetable growers now use fewer pesticides than in earlier years.

Integrated pest management (IPM) is one alternative that reduces the use of pesticides by combining crop rotations, resistant varieties, and other cultural and biological methods with pesticide applications only when pest populations are economically damaging.

According to the Extension Service, vegetable growers have increased their use of this alternative substantially during the 1980's. Combined state, federal, and industry funding of vegetable IPM projects receiving federal funds rose from approximately \$64,000 in 1978, when funds were largely focused on field crops, to almost \$3 million in 1989.

The availability of other inputs during the 1990's also is uncertain. Vegetable growers are facing increased competition for irrigation water and land in many major production areas.

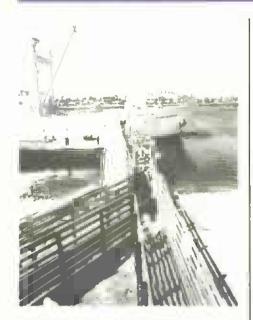
Migration of irreplaceable agricultural labor into other occupations during the 1990's is another impending concern. Depending on the resolution of these various issues, new low-cost vegetable farms in nontraditional areas of the U.S. and abroad could develop during the 1990's.

U.S. growers also are concerned about the prospects for a U.S.-Mexico free trade agreement, which could dramatically increase competition in the domestic vegetable market. Commodities most sensitive to tariff elimination include asparagus, broccoli, artichokes, cauliflower, and tomatoes.

The effects of tariff elimination could be somewhat mitigated by a potential snap-back provision and by small U.S. export gains for potatoes and dry beans, but would be complicated by increased U.S. investment in Mexico. The structure of the U.S. vegetable industry likely would change, as less efficient firms closed and larger U.S. firms shipped more vegetables from Mexico. [Catherine Greene (202) 219-0880] AO



#### World Agriculture and Trade



## U.S. Exports To Slip \$1-\$2 Billion

S. agricultural exports are expected to decline in fiscal 1991. Export value is expected to fall \$1.6 billion to \$38.5 billion, the first drop since fiscal 1986. Export volume is expected to be off 6 percent to 139.5 million tons, pulled down by a loss of coarse grain exports.

Following larger harvests by traditional grain importers, lower world grain trade is expected. And the U.S. share of world grain trade probably will drop following increased competitor production. U.S. com exports will decline largely because of a forecast one-third drop in total corn imports by the Soviet Union. And larger world wheat production is resulting in sharply lower wheat prices, but little response in import demand.

Higher prices are forecast for soybeans and soybean meal in 1991, offsetting an expected decline in the volume of soybean exports. Exports of high-value products are expected to continue rising and set a record. High-value exports will get a boost from continued economic growth in major markets and the lower value of the dollar.

U.S. agricultural imports are expected to fall slightly to \$22 billion. Imports rose \$1 billion to a record \$22.5 billion in fiscal 1990, following destructive winter freezes in Texas and Florida that sharply cut the citrus crop. Still, the U.S. trade surplus is expected to fall this year by \$1.1 billion to \$16.5 billion.

#### Grain and Oilseed Volume To Drop

The volume of U.S. wheat and flour exports is forecast to show little change from a year earlier in fiscal 1991, reaching 28.7 million tons as rising flour exports offset lower exports of unmilled wheat. However, the substantially lower prices brought on by record world production will drop the value about \$1.1 billion below a year earlier. Lower wheat prices account for most of the \$300-million decline expected in exports to China and most of a \$200-million drop expected in exports to Africa.

U.S. coarse grain export volume is forecast down 9.2 million tons from a year earlier to 59.8 million. Coarse grain sales to Mexico and a number of smaller importers are forecast down, but loss of sales to the Soviet Union accounts for almost all of the expected decline. The value of U.S coarse grain exports will probably decline nearly \$1 billion in fiscal 1991.

Similarly, the value of U.S. agricultural exports to the Soviet Union is likely to fall about \$1 billion in fiscal 1991. U.S. agricultural export credit guarantees are expected to help sustain Soviet purchases from the U.S. at around \$2 billion in fiscal 1991. But smaller U.S. shipments to the Soviet Union are expected because of the near-record Soviet grain crop, tight supplies of foreign exchange, and a sharp rise in food aid and export credits offered by competitors.

These factors, coupled with the USSR's economic, financial, and political turmoil, are expected to slash the volume of grain imports from all sources in 1990/91, perhaps by more than 25 percent. Most of this drop is expected to occur in coarse grains, the major U.S. export to the USSR.

With Soviet grain production increasing around 25 million tons, government procurements are expected to rise more than 10 percent, much less than planned. World wheat prices almost 30 percent below a year earlier will help the Soviets cut their wheat import bill.

Within the oilseed complex, U.S. soybean exports are expected to drop 1.1 million tons in fiscal 1991 to 16.1 million. An increase in foreign production, larger-than-anticipated beginning stocks in South American countries, and reduced demand in major importing countries are the major causes.

However, slightly higher soybean prices will leave export value nearly unchanged at \$3.8 billion. Soybean meal exports are expected to increase in both value and volume to 5 million tons and \$1.1 billion.

Despite prospects for higher cotton production in 1991, low beginning stocks and strong domestic use are projected to slightly lower U.S. exports to 1.6 million tons. Throughout the year, global production and use are expected to be in close balance. Export value is expected to remain unchanged from a year earlier at \$2.7 billion, despite the drop in volume.

The value of livestock, dairy, and poultry exports in fiscal 1991 is forecast up slightly from last year. Exports are expected to set a record \$6.9 billion, due mainly to gains in sales of beef and veal, hides and skins, poultry meat, butter, cheese, and nonfat dried milk. Increased sales of livestock products to Japan and Korea probably will more than offset projected declines in sales to the EC.

Horticultural product exports also are forecast to set a record of \$5.5 billion in 1991, up from 1990's \$5.2 billion. Exports of citrus fruits, almonds, and pistachios are expected to register marked gains. Continued strong demand from Canada and from East Asian markets is the major factor behind the projected growth.

#### World Agriculture and Trade

#### EC Purchases Likely To Be Flat

Offsetting gains and losses characterize the value of U.S. agricultural exports to the EC in fiscal 1991. Exports rose nearly \$300 million to \$6.8 billion last year. In 1991, lower cotton and meat exports probably will offset gains in horticultural and other high-value products.

While demand for protein meal by the EC livestock sector should rise slightly in 1991, soybean meal use is expected to decline. Soybean meal use will continue to shrink because of substitution there of other protein meals—particularly domestically grown rapeseed meal—for soybean meal. Soybean meal also will face continued competition from other EC protein crops (peas, beans, and lupins), which were produced in record volume in 1990.

In addition, near-record EC oilseed production last year and large fall rapeseed plantings have further weakened the outlook for EC oilseed and soybean meal imports. However, with soybean production in both Argentina and Brazil forecast to decline, reduced competition from South American suppliers should benefit U.S. soybean and meal exports.

U.S. agricultural exports to Japan also are expected to remain about the same in 1991, at a near-record \$8.1 billion. Although Japan's economy is in its longest post-war expansion, the economic outlook there is clouded by higher crude oil prices, higher interest rates, shaky financial institutions, and declining asset values.

Higher interest rates could dampen the capital spending that has propelled Japan's current economic boom. Personal consumption remains strong, but the stock market's slide has reduced optimism about the economy's ability to weather oil price rises.

The value of U.S. animal product exports to Japan is forecast to rise modestly this year, mainly reflecting higher expected U.S. export prices for beef and pork. After particularly rapid growth in recent years, U.S. beef exports to Japan were virtually unchanged in fiscal 1990, at 223,000 tons.

High beef stocks in Japan held down imports while continued high retail prices curtailed growth in consumption. With beef and veal production there forecast to increase about 5 percent in 1991 to 560,000 tons, Japan's beef imports are likely to remain steady.

Lower feed grain and soybean exports to Japan also are expected in 1991, more than offsetting the impact of higher prices. U.S. feed grain exports to Japan rose last year, but are forecast to decline in 1991 because of sluggish demand from the feed sector and greater competition from China's corn. Japan's imports of China's corn are expected to increase during 1990/91 because of a bumper harvest in China and an intensified export drive to earn hard currency.

Lower U.S. soybean sales to Japan also are forecast in 1991. Japan's soybean crushings in 1990/91 are expected to be slightly lower because of larger than normal beginning stocks.

U.S. cotton exports to Japan are expected to expand modestly in 1991, and horticultural exports are likely to benefit from rebounding U.S. grapefruit production. Fruit and other high-value product sales probably will go up because of the renewed strength of the Japanese yen.

## Sales to Taiwan Expected Down

Exports are expected to remain about the same to Eastern Europe, Hong Kong, the Middle East, and Canada. However, U.S. farm product sales to Taiwan are forecast to drop slightly in fiscal 1991, the first decline since 1986. The drop is due mainly to weaker demand for cotton, coarse grains, and soybeans. In addition, slower economic growth will weaken the demand for high-value products.

Taiwan's hog industry typically accounts for about half of all local feed grain and soybean meal consumption, and the industry switched from expanding to liquidating late last year. Early in 1990, increased Taiwanese pork exports to Japan and strong profits encouraged herd expansion, which in turn led to lower prices later in the year.

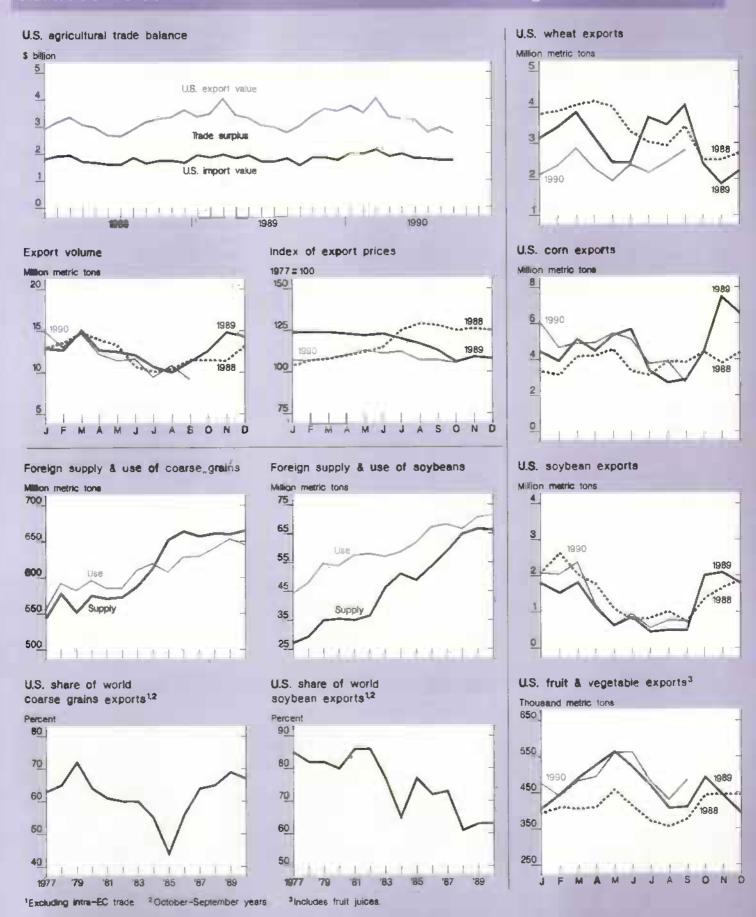
U.S. exports of cotton to Taiwan are forecast to decrease. Previous appreciation of Taiwan's currency and rising labor costs have substantially affected the competitiveness of Taiwan's export-oriented textile industry. Although some firms have upgraded their facilities, many others chose to relocate—mainly to China and Southeast Asia.

As with Taiwan, U.S. agricultural exports to South Korea in fiscal 1991 are expected to fall for the first time since 1986. Reduced sales of U.S. coarse grains are largely behind the anticipated \$100-million drop to \$2.6 billion. China's reemergence as a competitor in coarse grains and Korea's expanded use of low-priced wheat for livestock feeding explain the drop. [Stephen MacDonald (202) 219-0822]



#### **U.S.** Trade Indicators

#### World Agriculture and Trade



#### Farm Finance



### Farm Income To Shrink From Record

hile most farm income measures set records last year, domestic and international factors coming into play late last year mean that U.S. farmers are likely to see somewhat lower net incomes in 1991.

Cash receipts for crops are expected to increase in 1991, while steady livestock receipts are anticipated. However, reduced direct government payments and higher production expenses will overshadow the rise in cash receipts. So farmers' net cash income likely will drop 2-3 percent from last year in nominal terms. And net farm income is expected to slip about 5 percent from the 1990 record.

Net farm income is a measure of the value of production plus government payments less all costs in a calendar year, while net cash income reflects commodities sold in a calendar year plus government payments less out-of-pocket costs. Net farm income includes some noncash revenue and expense items, such as the imputed rental value of owner-occupied housing.

Equity growth is expected to slow to about 2 percent in 1991, mostly because land values are forecast to rise by a modest 2-4 percent. Farm borrowing is not expected to increase significantly because of the expected drop in income. When adjusted for the 4- to 5-percent inflation probable this year, farm equity and land values likely will contract.

#### Record Sales Expected

The record crop and livestock sales anticipated in 1991 are forecast to boost cash receipts 1-4 percent from last year, pushing total sales to \$170-\$175 billion.

Strong sales growth has been a driving force in the farm sector recovery since 1987.

Livestock receipts are expected to match 1990's record of \$91 billion. Cattle prices are forecast to remain strong, averaging in the mid-\$70's. Cash receipts for cattle and calves will be up about 3 percent in 1991, while hog receipts are anticipated to hold firm as an expected 3- to 4-percent price drop is offset by higher marketings.

Poultry sales are likely to be up 10-15 percent this year, reflecting strong gains in demand and production. Cash receipts for dairy products are expected to drop 10 percent, as production growth continues pushing down milk prices.

Total crop receipts likely will be \$78-\$82 billion in 1991, up \$1-\$5 billion from 1990. Pushed by low stocks and pulled by a strong livestock sector, feed grain sales are forecast to increase as much as \$3 billion. Corn receipts probably will be up 10 percent, while soybean receipts are expected to rise above \$11 billion.

Soybean prices, anticipated to be stable in 1991, likely will be under some additional pressure because of the planting flexibility allowed under the new farm and budget bills.

Com production is expected to increase if acreage reduction program requirements decrease from 1990's 10 percent. Some producers may opt not to participate in the government program this year and expand their planted acreage.

At the beginning of last year, wheat was one of the strongest crop commodities. Harvested acres increased 12 percent and yields rose by over 20 percent, resulting in a 35-percent gain in production.

Wheat prices fell throughout 1990 as traders anticipated the bumper crop. Wheat receipts in 1990 probably declined 5-10 percent, because the price decline more than offset the rise in volume. Wheat sales in 1991 are forecast down as much as \$2 billion, with planted acreage declining and stocks holding the market price below the 1990 average.

Direct government payments to farmers are forecast to fall 10-15 percent in 1991, due partly to the initial impact of the new farm bill. Total payments, however, are largely derived from 1990 program participation and market conditions. So, to an extent, the decline continues the late-1980's trend of a shrinking proportion of income from government payments.

Government payments to farmers, plus net Commodity Credit Corporation outlays, have fallen steadily from 10 percent of gross cash income in 1987 to about 5 percent in 1990.

#### Farm Income Is Forecast Down As Expenses Climb Faster Than Receipts

	1988	1989	1990	1991			
	\$ billion						
Gross cash income	170	178	184	185-190			
Cash receipts	150	159	168	170-175			
Direct government payments	15	11	9	8.9			
Cash expenses	112	123	125	127-133			
Net cash income	58	55	59	55-60			
Net farm income	42	47	49	44-49			

#### Farm Finance

The farm and budget bills are anticipated to reduce government payments to farmers by \$700 to \$900 million in 1991. Most of the reduction is due to the ineligibility of flexible acreage for advance deficiency payments.

#### A Cost Squeeze In 1991

The \$1- to \$6-billion increase in gross cash income in 1991 will be accompanied by a rise of \$2-\$8 billion in cash expenses. The most noticeable farm cost increases stem from the August oil price shock, which raised the 1990 fuel price index 10-15 percent over 1989.

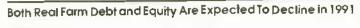
Despite forecasts of lower oil prices by the end of 1991, the fuel price index is anticipated to rise another 8 to 12 percent for the year. Prices of most production items, except feed and feeder livestock, are expected to drift upward.

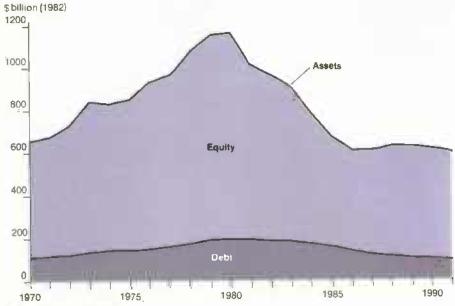
Total expenses are forecast to rise \$4-\$9 billion in 1991. Oil- and energy-related manufactured input expenses are projected to show the greatest gain, adding \$1-\$3 billion to the total. During the early 1980's financial crisis, interest expenses were almost 16 percent of all production expenses. In 1991, interest expenses are forecast to be less than 10 percent of production costs.

Gross cash income, which includes cash receipts, government payments, and farm-related income, is forecast up 1-3 percent this year. But farmers will feel a cost squeeze, as expenses rise more than revenues.

This decline in income is not expected to signal the beginning of a new era of farm financial stress. Adjusted for inflation, farmers have cut their debt 50 percent from the 1980 peak, and restructured their balance sheets in recent years.

Individual farmers with high debt loads will be most sensitive to lower net income. However, most farmers will not experience the debt repayment problems that characterized the mid-1980's.





Adjusted by GNP deflator.

#### Balance Sheet Remains Stable

The value of U.S. farm assets (excluding operator households) rose \$24 billion during 1990, an increase of about 3 percent. Total assets are forecast to rise to \$825-\$835 billion in 1991, as the rate of growth slows to less than 2 percent. However, with inflation outpacing asset growth, real farm asset values contracted in 1990 and probably will drop again this year.

Total farm debt is projected to increase only slightly during 1991. An increase would end a 7-year run of annual reductions. Due to the combined effects of slightly increasing land values and the improving repayment capacity of farm borrowers, farm lenders are now less concerned with loan defaults arising from land value declines.

With debt levels generally lower than in the early 1980's, farmers appear to be in a better financial position to withstand 1991's projected income dip. When income fell during the early 1980's, farmers had substantially higher debt servicing needs. As the Farmers Home Administration continues to resolve its problem loan portfolio, its farm debt is expected to fall \$2-\$3 billion this year. As of June 30, 1990, almost half of FmHA farm debt was owed by delinquent borrowers. Principal and interest payments delinquent more than 4 years totaled over \$5 billion.

Farm equity is expected to be about \$700 billion by the end of 1991. The nominal gain in farm equity projected for 1991 will mark the fifth consecutive year of growth. However, adjusted for inflation, farm equity likely shrank in 1990 and is expected to drop again this year.

Relatively high rates of return to farm equity and assets are expected to continue through 1991. The inflationadjusted rate of return on equity from current income is expected to be 3 to 4 percent in 1991, about the same as in 1990. [James Ryan (202) 219-0798, Diane Bertelsen (202) 219-0907, and Kenneth Erickson (202) 219-0798]

#### Farm Finance

#### Farm Income Forecast Errors

USDA's farm income forecasts are updated quarterly. The first forecast for the next calendar year is released at the Department's Annual Agricultural Outlook Conference in the late fall. The forecast is revised each succeeding quarter, until the final estimate is made approximately 18 months after the first forecast.

The estimates are final in that they are no longer subject to quarterly revision. However, historic estimates are subject to annual revisions. Sometimes the revisions are significant, like last year when the 1987 Agricultural Census became available.

Final income estimates for 1989 have recently been completed, and it is now possible to review the accuracy of the farm income forecasts for the last 8 years. Comparisons are made between the quarterly forecasts and the first published final estimates.

An accompanying table ("Average Absolute Value...") presents the average absolute error of income forecasts for 8 years, 1982 through 1989. The outlook conference forecasts as well as the forecasts for each subsequent quarter were compared to each annual estimate. Differences are absolute values so negative errors do not offset positive errors.



## Forecast Errors Shrink Over Time

The forecast errors shrink as the year progresses. After two quarters, average forecast errors for cash receipts and cash expenses declined about 50 percent. For noncash income items (mainly imputed rental values of farm houses and the inventory adjustment), average errors do not drop off as sharply. Methods of calculating some income estimates were changed last year, so early 1989 forecasts based on established methods diverge more than in years without such changes.

A second table ("Proportional Differences...") presents the forecast errors as percentages of the final estimate in order to reflect their relative importance. The \$2- to \$3-billion dollar differences between the first forecasts of direct payments, farm-related income, and the inventory adjustment represent 30 percent to over 100 percent of the final estimates.

The relative errors are largest for items of the smallest magnitude. In contrast, the first forecasts of cash receipts and expenses have errors that average 4-6 percent of the final estimates.

The forecast errors for net cash and net farm income are large because both are results of other forecasts. They are constructed by subtracting expense forecasts from revenue forecasts—any errors in the component forecasts are compounded in the net income calculations. In addition, net income numbers are less than half the size of total expenses and gross income.

#### Forecasts Show Some Bias

The third table ("Differences Between...") shows ranges of forecast errors and the number of years that outlook conference forecasts were above or below the final estimates.

Average Absolute Value of the	Differences Between Forecasts and
Final Estimates, 1982-89	

				Qu	arter		
	Outlook						
	confer-	1	2	3	4	5	6
	ence						
				S billion			
Cash receipts	6.6	5.2	4.5	2.9	3.0	1.9	0.9
Crops	3.8	3.4	3.2	2.4	2,4	1.3	0.5
Livestock	3.1	2.5	1.8	1.1	1.0	1.2	0.1
Direct government payments	29	1.5	0.7	0,6	0,3	0.6	0.3
Farm related income	1.6	1.6	1.4	1.1	1.0	1.0	0.9
Gross cash income	6.7	6.7	5.5	4.0	3.8	2.6	1.1
Nonmoney income	2.3	2.1	2.1	1.9	1.7	1.7	1.5
Inventory adjustment	3.4	3.0	2.7	2.2	19	2.0	1.3
Total gross income	7.0	6.5	5.6	5.0	5.0	3.7	2.3
Cash expenses	7.2	5.2	4.0	36	2.9	2.8	2.4
Total expenses	8.2	6.1	4.5	3.4	2.9	2.5	2.0
Net cash income	8.5	7.3	4.9	3.6	3 6	2.6	11.5
Net farm income	5.7	8.0	5.2	5.4	5.0	3.2	1.4
Total farm debt	8.5	7.1	6.1	5,1	3.4	2.4	2.5
Real estate	3.1	2.8.	2.8	3.1	1.9	1.3	1.3
Nonreal estate	5.8	5,1	4.4	3.0	2.3	1.6	1.3
			- 1	ndex poin	is		
Prices received by farmers	7	5	4	2	1	0	0
Crops	9	7	5	2	2	1	0
Livestock	6	5	4	2	1	0	0
Prices paid by farmers	4	3	2	1	1	0	0
Total farm output	6	6	5	5	4	3	2
Crops	7	7	6	7	5	3	1
Livestock	2	2	- 1	1	1	2	1

The first forecasts of gross income have more often been below the final estimate, although cash receipt forecasts were more often above.

Expense forecasts exceeded the final estimates more often than not, and net income forecasts were usually lower than final estimates. The first forecast of net cash income was below the final estimate each of the past 8 years, while net farm income was underestimated in 6 of the past 8 years.

The absolute error of the 1986 outlook forecast was almost \$14 billion for both net farm and net cash income. After two quarters, the forecasts of both were within \$5 billion of the 1986 estimates. The outlook forecasts were closest to final estimates for 1984. Net cash income was forecast at \$2 billion less than the estimate, while the net farm income forecast was within \$1 billion of the 1984 estimate.

Outlook conference forecasts of 1989 net cash income were nearly \$5 billion (8 percent) below the final estimate, and of net farm income nearly \$1 billion (2 percent) above the estimate. Forecasts made about a year later, in the fourth quarter of 1989, were only 1 percent less than the estimate of net cash income. [Diane Bertelsen (202) 219-0907]



Proportional Differences	Between Forecasts and	l Final Estimates,
Average 1982-89		

				Quá	rter		
	Outlook Confer- ence	1	2	3	4	5	6
				Percent			
Cash receipts	4	4	3	2	2	1	1
Crops	5	5	5	3	3	2	1
Livestock	4	3	2	- 1	1	2	L
Direct government payments	31	20	9	7	4	6	2
Farm related income	35	34	29	21	20	20	18
Gross cash income	4	4	3	2	2	2	1
Nonmoney income	13	12	- 11	- 11	10	9	-8
Inventory adjustment	117	83	67	61	68	91	71
Total gross income	4	4	3	3	3	2	1
Cash expenses	6	5	4	3	3	3	2
Total expenses	6	5	3	3	2	2	2
Net cash income	19	16	11	В	8	6	3
Net farm income	17	18	18	19	17	11	5
Total farm debt	5	4	4	3	2	1.	- 1
Real estate	4	3	3	3	2	1	1
Nonreal estate	8	7	6	4	3	2	2
Prices received by farmers	5	4	3	- 1	1	0	0
Crops	8	6	4	2	2	1	0
Livestock	4	4	3	1	1	0	0
Prices paid by farmers	2	2	1	1	1	0	0
Total farm output	7	- 6	6	4	2	2	2
Crops	9	8	7	4	1	0	1
Livestock	2	2	1	1	1	1	1

#### Differences Between Outlook Forecast and Final Estimate, 1982-89

	Absolute differences			Number of years		
	Average	Manimum	Maximum	Below	Above	
		\$ billion				
Cash receipts	5,6	0.2	16.0	3	5	
Crops	3.8	1,0	6.8	4	4	
Livestock	3.1	0.6	7.6	- 5	3	
Direct government payments	2.9	0.1	78	8	0	
Farm related income	1.6	0.5	4.2	6	2	
Gross cash income	6.7	1.0	17.0	6	2	
Monmoney income	2.3	0.5	2.6	2	6	
Inventory adjustment	3.4	0.9	10.2	1	7	
	7.0	1.4	13.5	5	3.	
Total gross income	7.2	2.8	12.5	3	3 <sub>2</sub>	
Cash expenses	8.2	06	13.5	2	6	
Total expenses	8.5	2.1	13.7	8	0	
Net cash income	5.7	0.1	13.6	6	2	
Net farm income	9.1	0,1	10.0		_	
	8.5	4.0	168	2	6	
Total farm debt	3.1	0.1	6.1	2	6	
Real estate	5.8	3.2	11.3	2	6	
Nonreal estate	3.0	J.	11.0	_		
The second first for some per	6.5	1.0	14.0	4	4	
Prices received by farmers	9.4	1.0	17.0	4	4	
Crops	5.6	1.0	12.0	4	4	
Livestock	3.6	1.0	60	2	6	
Prices paid by larmers		0.0	19.0	2	3	
Total farm output	5.9	-	23.0	2	5	
Crops	7.0	0.0	4.0	6	1	
Livestock	1.6	0.0	4,0		'	

#### Resources



## Higher Energy Prices Lift Expenses

armers are expected to spend \$127-\$133 billion in 1991 for agricultural inputs, 2-6 percent above a year earlier. Much of the rise is linked to higher energy prices throughout the economy. In addition, farmers' purchases will rise because more input-intensive crops likely will be planted in 1991 than last year.

Farmers' use of inputs depends heavily on the crop mix and the number of acres planted. Seeding rates, fertilizer and pesticide application rates, and tillage practices tend to change slowly over the years, leaving acres planted as the major determinant of total consumption.

Planted acreage of the principal row and solid-seeded crops peaked in 1981, fell dramatically in 1983 due to a policy shift, bounced back in 1984, and declined through 1988. During 1989 and 1990, planted acreage was 3-5 percent above 1988 levels.

Much of the planted acreage variation in the 1980's was because of fluctuations in the input-intensive row crops. Row crops include corn, sorghum, soybeans, flaxseed, peanuts, sunflowers, cotton, dry edible beans, potatoes, sweetpotatoes, sugarbeets, tobacco, and sugarcane.

The less intensively farmed solid-seeded (i.e., small grains) crop acreage declined between 1982 and 1988, but increased 6 million acres between 1988 and 1990. The solid-seeded acreage is dominated by winter wheat, but also includes the other wheats, oats, barley, rice, and rye.

Even if 1991 planted acreage remains about even with last year, the mix of crops will shift because of changes in Acreage Reduction Program (ARP) requirements, increased farm program flexibility, and changing market prices. There likely will be an increase in row crop acreage and a decrease in solid seeded crops. More specifically, wheat area is expected to drop while oilseed, corn, and cotton plantings move up.

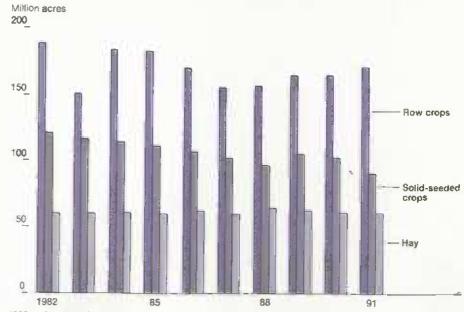
#### Seed Use To Slip, Fertilizer Prices Up

In 1991, seed use is forecast to fall about 4 percent from last year due to the decline in winter wheat acreage. In 1990, seed consumption by the eight major field crops was close to 6.3 million tons, down 13 percent from the 1981 record. Corn and soybean seeding rates were up in 1990 from a year earlier as soil moisture conditions returned to normal, while cotion seeding rates were slightly lower.

USDA's prices paid index for seeds in 1990 was similar to the previous year, and is likely to remain flat in 1991 if planted acreage declines and commodity prices continue weakening. Seed prices for nonhybrid crops tend to follow commercial crop prices.

In 1989, greater planted acreage, reduced seed supply, increased commodity prices, and more expensive off-season production led to some significant seed price increases. Forage seed prices also rose as farmers put more land into the Conservation Reserve Program. However, in 1990 seed supplies returned to normal while commodity prices fell from drought-induced levels of 1988 and 1989.

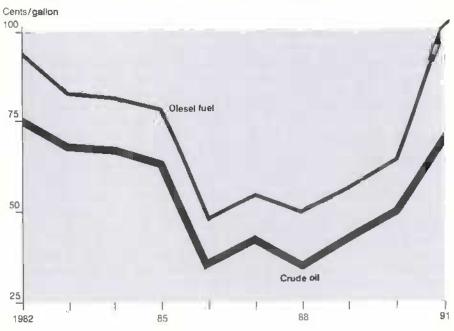




1990 and 1991 projected.

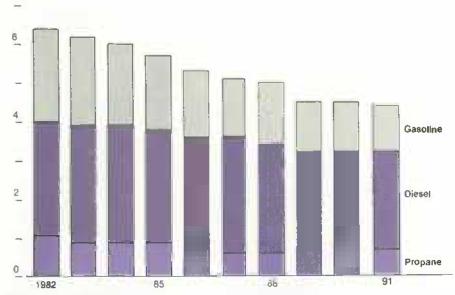
## Resources





## ... White Fuel Use Drops Slightly

#### Billion gallons



1990 and 1991 projected.

Fertilizer use in 1991 should be near 20 million tons, about even with last year, as row crop acreage expands sufficiently to offset the decline in small grains acreage. Fertilizer nutrient consumption stood at 19.9 million tons for the 1989 fertilizer year (July/June), only slightly less than the estimated 1990 consumption.

Last year's survey of application rates shows that the share of acres treated with nitrogen, phosphate, or potash was below or the same as 1989, but application rates were slightly higher for corn, soybeans, and cotton. Yet, for wheat, both the share of acres treated and application rates were lower than in 1989.

For corn, the major consumer of fertilizer nutrients, application rates for nitrogen, phosphate, and potash were 1-3 pounds above a year earlier. More normal soil moisture conditions in the Corn Belt probably had a positive effect on application rates.

Despite modest decreases in fertilizer demand projected for 1991, prices likely will be 5-10 percent above last year because of the recent surge in energy prices. Fertilizer prices since 1984 have been well below the peak-use years of 1981 and 1982 due to falling demand and lower energy costs. The sharp rise in energy prices during second-half 1990 signals a return to the nominal prices of 1981 and 1982.

In 1991, with wheat acreage down significantly and corn, soybean, and cotton acreage anticipated to increase slightly, pesticide consumption is expected to rise 2-4 percent from last year. As new products are more widely adopted which require very small amounts of active ingredient per acre, total pesticide poundage may actually decline even through the number of acres treated remains stable or even increases.

Despite slightly fewer planted acres expected in 1991, pesticide prices probably will increase 2-4 percent as petroleum price increases filter through to prices paid by farmers. Pesticide prices, as measured by USDA's prices paid index for agricultural chemicals, trended downward between 1984 and 1987. But the trend has reversed, with the index increasing 10 percent between 1988 and 1990.

# Tractor Sales Have Slipped

Since July, monthly sales of tractors and combines have fallen below a year earlier. While sales last year probably were up from 1989, the outlook for 1991 has become much less bullish. Nonetheless, tractor sales are projected near 1990 levels, despite the recent sales weaknesses.

## Resources\*

Furthermore, the outlook is for declining net farm income and fairly flat planted acreage. Also, some uncertainty regarding the impact of the 1990 farm bill may lower investment. The suspended GATT talks probably are dampening farmers' willingness to buy new equipment.

Forces pressuring up sales include stable or declining interest rates, increasing cash marketings, and stable farm debt/asset ratios.

Farmers' purchases of capital goods between 1980 and 1986 fell by nearly 60 percent. Very conservative investment decisions in the 1980's were influenced by rising real interest rates, declining commodity prices, dropping agricultural exports, falling land values, reduced planted cropland, the capital spending binge in the 1970's, and a reluctance to take on additional debt.

Tractors and other farm machinery typically make up about 60 percent of all capital expenditures. Buildings and land improvements account for about 25-30 percent, and cars and trucks the remaining 10-15 percent. Large new tractor purchases were one of the hardest hit categories, with sales off 75 percent between 1980 and 1986, but have recovered since then.

Following 1986, the 7-year slump for the farm machinery industry ended. Unit sales of new farm tractors and other large pieces of farm equipment increased in 1987, 1988, and 1989, and are likely to have posted further gains in 1990. Sales of new over-40 horsepower tractors may have reached 63,000-65,000 in 1990, up from nearly 60,000 in 1989.

# Energy Expenses Jump Sharply

If the world price of crude oil averages \$30 per barrel this year, farm energy expenses for diesel fuel, gasoline, liquified natural gas, and electricity likely will rise 10-15 percent from 1990. An average price of \$40 per barrel would raise farm energy expenses around one-fourth. In addition, the increase in the motor fuels tax will increase farm energy expenditures 1.5 percent.

With only a modest change in planted acreage forecast for 1991, energy use likely will remain about even with last year. Although rapid petroleum price increases tend to encourage energy con-

servation in the long run, short-run adjustments in energy consumption are often difficult to make because farmers tend to change their holdings of equipment slowly.

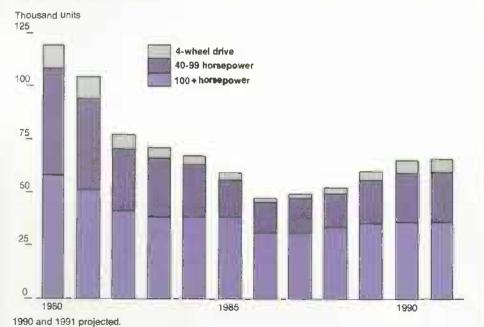
Farmers' consumption of petroleum products has been steadily declining since 1982, regardless of planted acreage. While acres planted influence energy use, other factors are more important. The switch from gasoline to diesel engines, reduced tillage operations, larger multi-function machines, and innovations in crop drying and irrigation have contributed to the decline in fuel consumption.

While no-till farming has not been widely adopted, reduced tillage systems are now as prevalent as conventional tillage systems in many parts of the country.

It is clear that crude oil prices dictate the price farmers pay for diesel fuel. As of November, the U.S. Department of Energy forecast that crude oil and diesel fuel prices would increase 30-40 percent in 1991, but unpredictable geopolitical forces will shape the final 1991 petroleum price structure.

Since agriculture directly consumes only 3-4 percent of all energy used in the U.S., changes in the farm sector's use will have little impact on petroleum prices. [Stan Daberkow and John Schaub (202) 219-0464]

## Tractor Sales To Remain Flat



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Imports, U.S. agricultural: 1986-7/26, 10/12 (fruit & vegetables). 10/16 (ag trade balance); 1987-1-2/9 (pork); 1988-1-2/27, 8/15, 9/13 (meat), 14; 1989-1-2/31, 5/14 (meat from Canada), 11/18, 12/12; 1990-1-2/25, 11/31 (fertilizer)

Industrial crops: 1990-9/13 Insurance, crop: 1989-9/2, 10/33

Interest rates, real: 1986-6/25, 9/26, 10/2; 1987-3/16, 6/20, 10/26; 1988-3/18, 6/18,20, 9/20, 12/19; 1989-6/24, 9/22, 12/17 (see also Financial markets, U.S., and Economy, general)

Iraq: 1990-9/16 Irradiation: 1987-7/15

Irrigation: 1988-3/28, 4/22, 12/25; 1989-4/30, 5/27; 1990-3/15, 9/23

Japan: 1986—1-2/13, 4/15, 7/15, 8/34; 1988—8/25; 1989—1-2/31; 1990-6/28

Labor costs (see Food marketing costs) Labor, farm: 1986-7/2; 1987-5/26

Leasing, farm equipment: 1986-6/16

Less developed countries (LDC's): 1987-4/11, 7/26, 9/28; 1988-1-2/2, 10/16,19; /989—5/2, 34, 8/2, 18, 9/15, 18, 10/12, 12/12 (see also Debt)

Livestock: 1987-7/11; 1988-8/27 (Soviet), 31, 11/15 (meat cut prices), 18,24; 1989.-3/6, 14, 4/6, 5/6, 6/10, 7/10, 8/26, 10/4, 13, 11/11, 12/33; 1990-5/2, 7/16 (EC), 8/2, 10/12 (beef price spreads), 10/29 (see also monthly Livestock Highlights)

Livestock, world production of (see World livestock production)

Margarine (vs. butter): 1987-3/12

Marketing costs (see Food marketing costs)

Meat consumption, U.S.: 1987-3/11, 9/13; 1988-11/12; 1990-

6/15 (see also Food consumption per capita) Mexico: 1990-5/14, 11/2

Middle East (see Exports—Forecasts by region)

Net cash income (see Farm income)

Net farm income (see Farm income)

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Nontariff trade barriers: 1986-8/34; 1989-3/17, 35, 4/19, 5/22, 7/28, 9/30, 10/13, 29, 11/27, 12/15, 28, 33; /990-3/30, 4/2, 19, 35, 5/14, 17, 6/28, 10/2, 11/15, 12/15

Oats: 1987—12/12; 1989—9/13

Ocean transportation (see Transportation)

Off-farm income: 1990-7/27, 9/2

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Oilseeds: 1989-12/11, 28 (see also World oilseed market)

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Parity: 1987-8/40

Peanuts: 1987-4/10 (support program); 1990-10/14

Pesticides: 1986-3/20, 10/24 (law changes), 12/22; 1988-3/28, 5/26, 8/32, 10/26, 12/22; 1989—6/32; 1990—1-2/32, 4/32, 8/14. 9/21, 11/22 (see also Food safety)

Petroleum (see Energy)

"Piggyback" shipping(see

Transportation-Trailer-on-flat-carshipping)

P.L. 480 policy: 1986—3/23; 1990—4/16, 8/25, 11/28, 12/28

Poland: 1989-11114; 1990-8/17 (see also Eastern Europe)

Pork (see Hog industry, U.S.)

Port capacity (see Transportation)

Pollution: 1987-9/18, 11/24, 12/23 1988-3/28 (see also Environ-

Poultry consumption, U.S.: 1986-7/24, 1987-3/11; 1989-11/11 (see also Food consumption per capita)

Produce: 1987-6/15 (imports), 7/23 (transportation), 11/15, 12/15 Production costs: 1986—3/17, 11/18, 12/14; 1987—1-2/26, 5/16, 8/23, 11/18; /988—11/24, 12/16; 1990—1-2/28, 7/22, 10/18, 21, 29, 11/2

Production credit associations (see Farm credit system) Productivity: 1987-3/21, 8/2, 10/12; 1990-1-2/32 Prospective plantings, U.S. (see Spring plantings, U.S.)

Rail transportation (see Transportation)

Real estate, farm (see Farm real estate) Research, agricultural: 1988-9/27, 12/31; 1989-14/25; 1990-

Retail food prices (see Food prices, retail)

Rice: 1987-11/14: 1989-6/15 (marketing loan), 9/30; 1990-6/28, 8/12

Rural economies, U.S.: 1988—8/37 (and drought), 9/30; 1989— 5/32, 9/25, 26, 10/26; 1990-7/27, 12/18

Saudi Arabia: 1990-4/12, 10/32

Seafood: 1990-4/39

Seed: 1988-10/28; 1989-11/25; 1990-1-2/32 (see also Production costs)

Soil Bank: 1986-9/30

South Africa (see Southern Hemisphere)

Southern Hemisphere: 1986-3/13 (Brazil), 9/15 (Argentina), 9/18 (Brazil), 11/15 (Australia & Argentina), 11/25 (South Africa); 1989—9/18 (see also Exports—Forecasts by regions)

Soviet Union (see USSR)

Soybeans: 1990—7/14, 9/18 (see monthly crop highlights)

Spring plantings, U.S.: 1988-5/8, 6/13 (com vs soybeans); 1989-11/2; 1990—5/2, 7/15

Stocks: 1990-7/30, 33

Storage capacity: 1986-7/10, 10/22; 1987-10/17

Sub-Saharan Africa (see Africa; Drought, African; and Famine in Africa)

Supply controls: 1987—5/29

Sweeteners: 1987-6/17 (HFCS), 10/13 (sugar), 1988-5/16 (demand); 1990--6/31 (Brazilian sugar)

Targeted Export Assistance: /986-3/23, 11/11; /988-5/20; 1990-8/25

Tax reform: 1986-11/26, (new law), 12/15; 1987-10/23; 1990-3/26

Tobacco; 1989-11/12, 27 (see Cigarette consumption)

Trade (see World agricultural trade)

Trade balances: 1986-9/26, 10/16

Trade liberalization: 1990-3/30, 4/2, 19, 35, 5/14, 17, 6/28, 10/2, 11/15, 12/15

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Ocean, ports: 1986-11/23; 1987-4/14; 1989-12/20

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Refrigerated rail shipments: 1986-4/22, 7/21

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Trucking: 1986-4/22 (insurance), 7/21; 1987-4/14, 7/23; 1988-8/34

Turkey consumption: 1987-11/13; 1989-11/11

USSR-

Grain production and trade: 1988-3/17, 5/29, 6/28, 7/26, 8/27, 12/13; 1989-4/23, 6/21, 12/24; 1990-5/33, 12/28 New farm policy: 1986—7/26; 1988—7/26, 8/27, 12/13;

1989-4/23, 6/21, 12/24; 1990-5/33, 12/28

Sugarbeet production: 1990-6/13

Trade updates: 1986-1-2/13, 4/15; 1988-3/17, 6/28, 7/26,

8/22; 1990-12/28

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Vietnam: 1990-8/12, 9/21

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Wheat industry, U.S.: 1989-3/32, 4/14, 17, 7/28, 8/8, 12, 17; 1990-

Wheat, world market (see World wheat market)

Wool: 1987—6/18 (imports); 1989—7/10

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4/2, 35, 7/33, 9/16, 18, 31, 10/2, 14, 16, 32

World cotton market: 1986-5/2; 1988-8/13 (U.S. marketing

loans); 1989-4/19; 1990-11/11

World crop production (and consumption): 1986-5/2; 1988-7/15; 1989-4/19, 7/28, 9/30, 10/29, 11/2, 12/18, 28; 1990-1-2/2, 7/33

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World food needs: 1986-5/18; 1988-10/18; 1989-5/2, 34, 9/15,

10/12; 1990-5/19, 9/31

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10/12, 29; 1990-7/33

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9/14; 1989-5/16, 12/28

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- · Livestock: cattle, hogs, broilers, eggs, turkeys, dairy
- · Crops: wheat, rice, feed grains, oilseeds, cotton, tobacco, sugar, vegetables, fruit

These commodity summaries are included in the "Agricultural Economy" section.

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# **Rural Conditions** and Trends

# Statistical Indicators

# Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

		1989		1	990			1991	
	- 11	Annual	II	III	IV F	Annual F	IF	II F	Annual F
Prices received by farmers (1977=100) Livestock & products Crops	148 1 <b>56</b> 139	147 160 134	152 172 131	150 173 126	143 165 121	148 170 125	145 164 125	143 164 121	Ξ
Prices paid by farmers, (1977=100) Production items Commodities & services, interest, taxes, & wages	167 177	165 177	1 <b>69</b> 183	170 184	174 188	170 184	=	Ξ	Ξ
Cash receipts (\$ bil.) 1/ Livestock (\$ bil.) Crope (\$ bil.)	157 81 77	159 84 75	167 89 79	182 92 89	166 94 72	168 91 77	167 91 76	179 91 89	170-17: 89-9: 78-8:
Market basket (1982–84=100) Retail cost Farm value Spread Farm value/retail cost (%)	124 108 133 30	125 107 134 30	132 114 142 30	134 114 145 30	=		<u> </u>	Ξ	Ξ
Retail prices (1982–84=100) Food At home Away from home	125 124 127	125 124 127	132 131 133	133 132 134	134 133 138	132 132 134	Ξ	<u> </u>	Ξ
Agricultural exporte (\$ bit.) 2/ Agricultural imports (\$ bit.) 2/	9.8 5.5	39.7 21.5	9.7 5.7	8.5 4.8	9.1	40.2 22.5	11.3	98	38.5 22.0
Commercial production  Red meat (mil. lb.)  Poultry (mil. lb.)  Egge (mil. doz.)  Milk (bil. lb.)	9,871 5,538 1,394 37.7	39,418 22,039 5,587 144.3	9,542 5,904 1,413 38.6	9.618 5,982 1,412 36.7	9,851 6,130 1,445 36,0	38,592 23,627 5,660 148.3	9,519 5,925 1,415 37.8	9,685 6,285 1,430 39.2	38,40: 24,84: 5,71: 150 :
Consumption, per capits Red meat and poultry (lb.)	54.7	220.6	54.1	55.3	57.8	220.7	54.1	56.1	226.
Corn beginning stocks (mil. bu.) 3/ Corn use (mil. bu.) 3/	4.812.7 1,970.1	4,259.1 7.260.2	4,812.7 1,970.1	2.843.2 1,498.9	1,344.5	1,930.4 8,115.0	=-	_	1,34 8,04
Prices 4/ Choice steers—Omaha (\$/cwt) Barrows & gitte—7 mkts. (\$/cwt) Broilers—12-city (cts./lb.) Egge—NY gr. A large (cts./doz.) Milk—all at plant (\$/cwt)	73.85 41.84 67.1 75.2 12.37	72,52 44,03 59,0 81,9 13,56	77.52 59.01 56.6 74.6 13.57	75.48 57.67 57.2 77.8 14.20	78-79 51-52 48-49 86-87 12.20-	77-78 54-55 54-56 81-82 13.65- 13.85	74-80 50-56 50-56 74-80 11.20- 12.20	76-82 51-57 52-58 69-75 10.50 11,10	75-8 50-56 51-5 72-7 10.95- 11.9
Wheat—KC HRW ordinary (\$/bu.) Corn—Chicago (\$/bu.) Soybeans—Chicago (\$/bu.) Cotton—Avg. spot mkt. (cte./ib.)	4.38 2.75 7.59 63.1	4.36 2.55 6.70 63.7	3 88 2.80 6.07 74.3	2.94 2.53 6.10 75.6	12.80	13.65			-
	1983	1984	1985	1986	1987	1988	1989	1990	1991
Gross cash income (\$ bil.) Gross cash expenses (\$ bil.)	150.6 111.0	155.5 119.0	157.2 109.3	152.0 105.2	164 3 108.2	170,4 112.3	177.5 122.8	184 125	185-19 127-13
Net cash income (\$ bil.) Net farm income (\$ bil.)	39.5 15.3	38.6 26.3	<b>47.9</b> 31.0	4 <b>6.7</b> 31.0	58.1 41.3	58.1 41.8	54.6 46.7	59 49	55-6 44-4
Farm real estate values 5/ Nominal (\$ per acre) Real (1977 \$)	788 472	801 459	713 395	640 346	599 317	632 322	667 325	693 322	714-72 315-32

<sup>1/</sup> Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.—Sept. fiscal years ending with year indicated. 3/ Dec-Feb. first quarter: Mar.—May second quarter; June—Aug. third quarter: Sept.—Nov. fourth quarter; Sept.—Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. 5/ 1990—91 values as of January 1. 1986—89 values as of February 1. 1982—85 values as of April 1. F = forecast, — = not available.

# U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

		Annual		16	989		1990	
	1987	1988	1989	101	IV	1	11	III P
			billion (quar	terly data sea	sonally adjuste	ed at annual fa	ites)	
ross national product	4,515.6	4,873.7	5,200.8	5,238.6	5,289.3	5,375.4	5,443.3	5.520.6
ersonal consumption	0.000.4	0.000.0	3,450.1	3,484 3	3,518.5	3,588 1	3,622.7	3.697.6
expenditures	3,009 4	3.238.2 457.5	474.6	487.1	471.2	492.1	478.4	481.9
Durable goods	423.4 1,001.3	1,060.0	1,130.0	1,137.3	1,148.8	1,174.7	1,179.0	1,207.1
Nondurable goods	178 4	191.1	204.6	206.9	208.7	212.9	212 8	216.0
Clothing & shoes Food & beverages	530.7	562.6	595.3	597.6	602.2	616.4	623.3	630.
Services	1.584.7	1,720.7	1,845.5	1,859.8	1.898.5	1,921.3	1.965 3	2,008.
ross private domestic							750.0	700
vestment	699.5	747.1	771.2	775.8	762.7	747.2	759.0 745.6	760. 750.
Fixed investment	671.2	720.8	742.9	746.9	737.7	758.9 -11.8	13.4	730.
Change in business inventories	28.3	26.2	28.3	28,9	25.0 -35.3	-30.0	-24.9	-39.
et exports of goods & services	-114.7	-74.1	-46_1	-49.3	-35.3	-30.0	27.0	
overnment purchases of	001.4	962.5	1,025.8	1,027.8	1,043.3	1,070.1	1,086.4	1,101.
cods & services	921.4							
			1982 \$ billion	(quarterly dat		idju <b>sted</b> at ann		4.476
oss national product	3,845.3	4,018.9	4,117.7	4,129.7	4,133.2	4,150.8	4,155.1	4,173.
ersonal consumption	2,515.8	2,606.5	2,656 8	2,675.3	2,669.9	2,677 3	2,678.8	2,699.
xpenditures Durable moode	391,4	418.2	428.0	438.1	423.1	437.6	428.8	429
Durable goods Nondurable goods	892.7	909.4	919.9	923 4	923.0	915.6	911.2	918.
lothing & shoes	160.7	165.0	172.7	176.6	175.1	174.2	171.3	174.
Food & beverages	424.0	462 2	462.9	483.0	460.3	457.4	459.3	459. 1,352.
Services	1,231.6	1.278.9	1.309.0	1,313.8	1,323.B	1,324.2	1,340.8	1,004.
	6000	705 7	716.9	722 3	709.1	700.7	700.7	897
oss private domestic investment	669.0 646.2	705.7 682.1	693.1	697.7	690,2	702.9	691.2	691.
Fixed investment	22.8	23.6	23.8	24.6	18.9	-2.2	9.5	5.
Change in business inventories	-118.5	-75.9	-54 1	-64.1	-47.9	-35.4	-44.8	-45
et exports of goods & services overnment purchases of	-(10.5							
oods & services	779.1	780 5	798.1	798 2	802.2	807.9	820 2	821.
IP implicit price deflator (% change)	3.2	3.3	4.1	3.2	3.8	4.8	4.7 3.925.7	3,971
sposable personal income (5 bil.)	3,194.7	3,479.2	3.725 5	3.743.4	3,799.0	3,887.7 2,900.9	2,902.8	2.899
sposable per. income (1982 \$ bil.)	2,670.7	2.800.5	2,869.0	2,874.3	2,883.2 15,210	15,527	15,639	15,77
sposable per, income (1982 \$ bil.) r capita disposable per, income (\$)	13,094	14,123	14,973	15.026	11,541	11,586	11,564	11,51
r capita die, per, income (1982 \$)	10.946	11,368	11,531	11,538	11,341	11,000	111001	1110
r capita die. per. income (1982\$) S. population, total, incl. military	040.0	248.4	240.0	249.1	249 8	250.4	251.0	251
oroad (mil.) vilian population (mil.)	243.9 241.7	246.4 244.1	248.8 248.6	246.9	247.6	248 2	248.8	249
anian population (iiii.)		Annual		1989		1	990	
	4000		1989	Oct	July	Aug	Sept	0
	1987	1988			•	_	4051	
			N	fonthly data e				400
dustrial production (1987=100)	100.0 140.1	105.4 142.8	108.1 144.9	107.7 144. <b>4</b>	110.4 14 <b>6</b> .1	110.4 144.4	110.5 143.3	109 141
ading economic indicators (1982=100)	140.1	142.0	144.0	144.4	1.40.1	,		
villan employment (mil. persons)	112.4	115.0	117.3	117.6	118.0	117. <b>7</b>	117.9	117
vilian unemployment (atte (%)	6.1	5.4	5.2	5.2	5.4	5.5	5.6	4 705
reonal Income (\$ bii. annual rate)	3,766.4	4.070.8	4,384 3	4,441.0	4,663.8	4,677.8	4,699.4	4,705
		0.470.4	2 224 4	2 101 0	3,287.8	3,305.3	3,319.7	3,321
oney etock-M2 (daily avg.) (\$ bil.) 1/	2,913.2	3,072 4	3,221.6	3,181.9	7 66	7,44	7.38	7
ree-month Treasury bill rate (%)	5.82	6.69 9.71	8.12 9.26	7.63 8.92	9.24	9.41	9.58	9.
A corporate bond yield (Moody's) (%) busing starts (1,000) 2/	9 38 1,621	1,488	1,376	1,423	1,153	1,131	1,107	1,0
		10.6	9.9	8.9	9.7	9.4	10.1	6
ito sales at retail, total (mil.)	10.3 1.51	1.49	1 50	1.51	1.48	1.46	1.48	
usiness inventory/sales ratio	128.5	137.5	144.5	145.2	150.2	150.2	152.1	P 15
londurable goods stores (\$ bil.)	80.5	85 2	90.7	91.6	96.0	97.2	98.3	P 9:
Food stores (\$ bil.)	25.8	27 2	29.1	29.5	30.7	30.7	31.4	P 3
Eating & drinking Places (\$ bil.)	12.8	13.8	14.5	14.6	15.4	15.3	15.3	P 1
Apparel & accessory stores (\$ bil.)	6.6	7.1	7.6	7.7	8.1	8.1	8.0	P
		Annual		1989			1990	
	1987	1988	1989	Nov	Aug	Sept	Oct	N
				Average of dail	v (ates			
			ĺ	Traings () sen	, , , , , , , , , , , , , , , , , , , ,			
oreign exchange value of the dollar Japanese yen per U.S. dollar	144.8	128 2	137.9	143.4	147.4	138.5	129.6 1.520	128
	1.797		1.874	1.766	1.570	1.570		1.4

<sup>1/</sup> Annual data as of December of the year listed, 2/ Private, including farm, P = preliminary, -- = not available.

Information contact. Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

							_					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F	Average 1980~89
					Arm	ual percent	change					
World, less U.S.												
Real GDP	1.5	1.3	2.3	3.7	3.3	3.1	3.3	4.0	3.3	2.4	2.3	2 9
Consumer prices	13.6	13.1	11.8	12.5	13.0	9.1	11.4	17.8	32.1	63.9	16.4	15,1
Merch, exports	-2.7	-6.7	-2.7	5.1	2.4	10.0	19.0	12.0	7.0	17.0	14.2	6.5
Developed less U.S.										*****		4.5
Real GDP	1,1	8.0	2.2	3.0	3.4	2.7	3.4	4,3	4.0	3.3	2.7	2.8
Consumer prices	10.0	8.2	5.8	4.0	4.5	2.7	2.5	3.1	4.3	5.5	5.0	5.7
Merch, exports	-3.2	~4.4	-0.5	6.9	4.6	19.5	17.7	12.3	6.0	16.3	13.7	7.6
Developing								12.0			10.7	
Real GNP	2.0	2.1	2.2	4.1	3.9	4.0	3.9	4.2	3.0	3.4	4.3	3.4
Consumer prices	28.4	25.3	32.7	38.2	39.8	27 0	35.3	57.0	78.0	190.0	46.6	38.9
Merch, exporte	-1.8	-10.4	-8 5	2.0	-1.6	-6.1	22.2	13.5	9.6	12.5	14.8	4.7
Asia, Incl. China											4 170	421
Real GDP	6.1	5.6	8,1	8.3	8.6	5.9	8,1	9.0	5.0	5.0	6.4	7.0
Consumer prices	9.3	6.4	6.6	6.1	5.0	5.6	7.4	11.8	10.1	6.7	10.1	8.2
Merch, exports	7.6	-0.5	4.5	14.6	-0.9	8.0	30.1	23.2	11.5	8.8	12.4	12.8
Latin America												
Real GDP	-0.4	-1.1	-2.8	3.6	3.4	4.1	3.0	0.5	1.6	-0.5	3.5	1.8
Consumer prices	60.1	67.1	108.7	133.5	145.1	82.1	116.1	218.0	348.2	625.6	131.0	133.2
Merch, exporte	6.5	-10.6	-1.0	6.7	-5.5	-17.9	13.7	14.1	10.2	11.7	11.4	4.6
Africa												
Real GDP	-1.9	2.0	-1.1	0.6	4.0	2.3	1.2	2.5	3.2	2.6	2.6	2.0
Consumer prices	23.4	13,1	16.0	20.6	13.2	12.5	13.1	19.2	23.9	17.0	15.9	17.1
Merch, exports	-10.7	-9.1	-8.0	3.4	-2.4	-17.4	14.7	~4.1	10.5	17.7	11.1	0.3
Middle East			_									
Real GDP	2.7	1.3	1.7	-0.9	-0.2	-0.6	-0.8	3.8	6.8	7.3	3.8	1,4
Consumer prices	16.8	12.9	11.9	14.3	17.1	14.9	19.2	10.4	14.5	21.6	20.1	15.8
Merch, exports	-3.8	-21.1	-22.2	-10.5	-6.8	-19.6	25.2	1.4	26.9	8.2	7.8	-0.8
Eastern Europe, incl. US												
Real GDP	0.6	2.0	2.3	1,6	1.8	3.0	1.3	4.2	1.0	-3.3	-3.5	2.0
Consumer prices	6.6	12.8	5.4	4.2	6.0	7.4	9.1	15.7	68.1	105.1	15.2	15.0
March, exports	9.1	1,3	3.7	1,8	0.2	8.2	11.2	0.8	-1.2	4.8	-9.8	5.0

F = forecast.

Information contact: Aiberto Jerardo, (202) 219-0708.

## Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average.

	Annual			1989				1990		
	1987	1986	1989	Nov	June	July	Aug	Sept	Oct R	Nov P
					1977=100					
Price a received									4.4	
All farm Products	128	138	147	147	151	152	151	148	146	145
All crops	106	127	134	128	129	130	126	123	121	123
Food grains	103	138	156	150	127	116	108	103	101	98
Feed grains & hay	8.5	120	128	118	133	131	126	120	-114	111
Feed grains	61	117	123	113	129	128	122	115	198	105
Cotton	99	95	98	108	103	104	107	107	112	113
Tobacco	129	138	136	148	147	144	143	152	151	152
Oil-bearing crops	79	108	102	89	94	95	95	95	94	92
Fruit, all	181	184	190	209	191	205	187	203	188	209
Fresh market 1/	194	196	200	219	202	218	196	214	194	221
Commercial vegetables	144	144	158	134	118	133	138	141	156	177
Freeh market	147	137	140	123	104	122	129	134	153	181
Polatoes & dry beans	128	124	187	166	223	231	205	135	118	124
Livestock & Products	148	150	180	185	173	173	174	173	171	166
Mest enimals	163	186	174	175	197	198	197	193	198	191
Dairy products	129	128	139	181	142	145	147	140	136	132
Poultry & eggs	107	116	138	134	127	125	129	135	129	127
Prices paid										
Commodities & services.										
interest, taxes, & wage rates	162	169	177	_		164		_	188	_
Production items	147	157	165	_		170	-		174	_
Feed	103	128	135		Sec.	130		_	124	_
Feeder livestock	179	192	194		_	214	_		219	
Seed	148	150	165			163	_		183	_
Fertilizer	118	130	137	_	_	130	_	_	132	
Agricultural chemicals	124	126	132			141	-	-	141	
Fuele & energy	101	166	161	· -		185		-	238	
Farm & motor supplies	145	148	155	_		156		-	159	
Autos & trucks	208	215	223			233			233	_
Tractors & self-propelled machinery	174	181	193		_	201			208	-
Other machinery	185	197	208		_	217			220	-
Building & Jencing	137	138	141			143			144	
Farm services & cash rent	147	148	158		-	183		_	183	
int payable per acra on farm real estate debt	189	182	177			178			178	-
	144	148		_		156	-		156	-
Taxes payable per acre on farm real estate			152 185	_		193		_	193	_
Wage rates (seasonally adjusted)	186	171			-		_			
Production items. Interest, taxes, & wage rates	151	160	167		_	171			175	_
Ratio, prices received to prices paid (%) 2/	76	82	83	83	83	8.3	82	80	78	77
Prices received (1910-14=100)	578	633	873	672		694	888	678	668	663
Prices paid, etc. (parity index) (1910-14-100)					891				1,291	003
Parity ratio (1910-14=100) (%)2/	1,110	1,167	1.220 55		-	1.265	_		55	
Lend temp (INIA-14-100) (A)	51	54	55	_		58		_	33	

1/ Fresh market for noncitrus; tresh market & processing for citrue. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January. April, July, & October. R = revised. P = preliminary. — = not available.

information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annust 1/		1989				1990			
	1987	1988	1989	Nov	June	July	Aug	Sept	Oct R	Nov P
CROPS All wheat (\$/bu.)	2.57	3.72	3.72	3.72	3.08	2.79	2.58	2 48	2.42	2.36
Rice, rough (\$/cwt)	7.27	6.83	7.30	6.94	7.08	6.95	6.64	6.25	6.02	8,12
Corn (\$/bu.)	1.94	2.54	2.38	2.24	2.63	2.62	2.51	2 32	2.19	2.10
Sorghum (\$/cwt)	3.04	4.05	3.79	3.68	4.29	4.44	4.14	3.95	3.55	3 58
All hay, baled (\$/ton)	65.10	85 20	88.00	83.60	87.80	85 60	84.40	85.70	86.00	81.50
Soybeans (\$/bu.)	5.88	7.42	5.70	5.66	5.88	5.97	6.13	5.99	5.87	5.51
Cofton, upland (cts./lb.)	63.7	55.0	6/ 63.3	65.6	62 3	82.9	64.8	65.0	67.5	68.3
Potatoes (\$/cwt)	4.38	6.02	6.85	8.32	8.84	9.31	8.36	5.47	4.69	4.93
Lettuce (\$/cwt) 2/	14.80	14.70	12.60	13.30	8.04	12.40	14.50	18 40	19.70	25.00
Tomatoes fresh (\$/cwt) 2/	25.90	28.90	32.90	28.10	21.90	26.80	27.30	24.00	31.30	30.10
Oniona (\$/cwt)	12.50	9.75	11 60	9.83	11.20	9.41	9.77	B.78	10.50	10.20 18.20
Dry edible beans (\$/cwt)	16.50	29.60	28.70	27.70	33.70	32.90	27.40	18.30	17.80	10.20
Apples for fresh use (cts./lb.)	12.7	17.4	13.4	13.3	12.6	18.4	20.4	24.5	19.4	19.8
Pears for fresh use (\$/ton)	227.00	358.00	332.00	299.00	463 00	430.00	288.00	389.00	373.00	390.00 6.31
Oranges, all uses (\$/box) 3/	5.40	7.18	6.89	6.28	5.84	5.19	5.07	5.31 7.22	4.48 6.51	5.53
Grapefruit, all uses (\$/box) 3/	4.98	5.43	4.49	5.87	10 08	12.32	6.44	1.22	0.51	5.53
LIVESTOCK						70.00	70.40	75.00	75 50	75.70
Beef cattle (\$/cwt)	61.37	66.80	69.68	69.80	74.40	73 60	76.10 99.20	75.00 95.50	75.50 92.80	92.80
Calves (\$/cwt)	78.10	89.85	91.84	86.70 45.00	98.10 60.10	98.50 80.80	55.90	54.30	56.80	49.70
Hogs (\$/cwt)	50.79 77.92	42 53 69.50	43.24 67.33	58.70	55.40	54.40	54.00	52.B0	52.00	48 PO
Lambs (\$/cwt)	11.02	08.30	67.33	56.70	33.40	34.40	34.00	J2.BQ	32.00	
All milk, sold to plants (\$/cwt)	12.54	12.26	13 58	15.60	13 80	14.10	14.30	14.20 12.50	13.20 11.80	12.80 10.50
Milk, manuf, grade (\$/cwt)	11.37	11.15	12.38	14.90	13.10	13.10	12.90 33.2	35.2	29.0	28.2
Broilers (cts./lb.)	28.3 53.1	34.0 53.3	36.0 70.0	29.4 79.2	34 1 62.7	55 6	65.6	68.5	73.5	72.9
Egge (cts./doz.) 4/	34,3	37.3	40.0	40.7	38.2	38.4	39.9	40.6	42.2	43.0
Türkeys (cts./lb.) Wool (cts./lb.) 5/	91.7	138.0	122.4	102.0	93.4	80.4	74.4	71.9	83.5	58.0
ייט וויט וויט וויט וויט וויט וויט וויט	W 17	130.0	122.7		24.7		, 7.7			

<sup>1/</sup> Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawali. 3/ Equivalent on-tree returns.
4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments. 6/ Weighted average of first 8 months of the season – not a projection for 1989/90. R = revised. P = preliminary.

Information contact: Ann Duncan (202) 219-0313.

## Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1989				- 1	990			
	1989	Oct	Mar	Apr	May	June	July	Aug	Sept	Oct
						1982-8	4 <b>=1</b> 00			
Consumer Price Index, all items	124.0	125. <b>6</b>	128.7	128.9	129.2	129.9	130.4	131.6	132.7	133.5
Consumer Price Index, less food	123.7	125. <b>4</b>	128.1	128.4	128.7	129.4	130.0	131.3	132 6	133.5
All food	125.1	120.5	131.5	131.3	131.3	132.0	132.7	132.9	133 2	133 6
Food away from home	127.4	129.1	131.8	132.5	133.0	133 4	133.0	134.3	134.6	135.0
Food at home	124.2	125.4	131.9	131.1	130.9	131.7	132.5	132.7	132.9	133.4
Meats 1/	116.7	118.1	124.0	125.2	126.6	129.6	130.3	130.5	131.0	131.7
Beef & veal	119.3	120.0	126.6	128.0	128.5	129.0	129.2	128.5	129.5	130.1
Pork	113.2	114.9	121.0	121.6	125.5	132.9	134.8	136.5	135.4	136.4
Poultry Fish Eggs Dairy products 2/ Fate & oile 3/ Fresh truit	132.7	131.2	134,8	132.1	132.3	134 0	135.3	133 6	134.6	133.7
	143.6	143.9	148,0	147.2	143.8	143.7	143.3	145.2	147.4	147.0
	118.5	122.9	131,6	130.3	115.0	112.2	109.1	119.6	120.6	125.5
	115.6	118.2	120,0	125.2	124.7	124.9	125.7	127.3	127.6	128.6
	121.2	121.6	124,2	124.3	125.0	125.5	126.6	127.4	128.2	128.1
	152.4	156.6	171,1	175.7	174.9	173.2	176.6	169.5	168.7	163.2
Processed fruit Fresh vegetables Potatoes Processed vegetables	125.9	127.1	136.7	138.1	139.2	140.1	140.1	140.0	139,8	139.5
	143.1	134.8	168.3	145.6	139.8	140.0	143.8	139.6	137,3	142.2
	153.5	139.8	170.6	187.3	187.4	185.8	179.7	169.8	152,0	139.9
	124.2	124.6	126.6	127.0	127.8	127.6	128.2	128.6	128,8	127.9
Cereale & bakery products	132.4	135.0	137 <b>6</b>	138.9	139.3	140.1	140.5	141.4	141.6	141.9
Sugar & sweets	119.4	121.3	123.0	123.6	124.4	124.5	124.9	125. <b>6</b>	125.8	126.6
Beverages, nonalcoholic	111.3	111.8	113.1	112.4	112.7	113.3	114.0	114.3	114.2	115.2
Apparel Apparel, commodities less footwear Footwear Tobacco & emoking products Beverages, alcoholic	117.1	121.8	124.9	128.2	124.5	121.8	118.8	120.5	125.8	127.4
	114.4	117.6	116.9	118.6	118.5	117.3	116.1	116.3	118.6	120.5
	164.4	168.8	175.1	175.6	176.7	180.9	185.7	185.8	185.8	185.9
	123.5	125.2	127.8	128.2	128.9	129.3	129.9	130.2	130.8	131.0

<sup>1/</sup> Beef, veal, lamb, pork, & processed meat. 2/ includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

		Annual		1989			1	990		
	1987	1988	1989	Oct	May	June A	July	Aug	Sept	Oct
					1982 = 10	00				
Finished goods 1/	105.4	108.0	113.6	114.9	117.7	117.8	118.0	119.2	120.3	122.3
Consumer foods	109.5	112.6	118.7	119.5	124.5	124.2	124.9	125.0	124.1	124.6
Fresh fruit	112.0	113 5	1.11.9	121.1	107.7	117.0	132.2	118.3	115.3	117.3
Fresh & dried vegetables Dried fruit	103.7 95.0	105.5 99.1	11 <b>6.9</b> 103.0	110.0 103.7	101.3 105.3	99.9 105.0	104.9 104.9	98.6	94.3 104. <b>9</b>	101.5 110.0
Canned fruit & juice	115.3	120.2	122.7	122.9	127.2	127.5	127.3	127.1	127.7	127.8
Frozen fruit & juice	113.3	129.8	123.9	124.0	146.0	148.3	148.3	148.6	139.5	137.0
Fresh veg. excl. potatoes Canned veg. & juices	99.0 103.5	100.4 108.3	103.9 118.6	101.0	78.0 118.2	83.7	93.3 115.9	79.0	79.4	98.2
Frozen vegetables	107.3	109.6	115.5	115.5	120.1	118.1 117.6	117.8	116.1 118.0	116.5 118.3	114.4 131.0
Potatoee	120.1	113.9	153.6	140.2	174.7	147.2	139.9	165.4	155.4	121.6
Eggs Bakery products	87. <b>6</b> 118.4	88.6 126.4	119. <b>6</b> 135.4	124. <b>3</b> 137.3	95.3 1 <b>40.7</b>	100.4	91.6 140.6	114.4 140.8	112.6 141.6	121.6 142.4
Meats	100.4	99,9	104.8	104.8	119.1	120.3	119.6	120.0	118.7	119.5
Beef & veal	95.5	101.4	108 9	105.0	117.6	115.7	113.3	116.9	114.1	117.4
Pork	104.9	95.0	97.7	102.3	127.2	130.1	130.9	128 2	119.7	124.0
Processed poultry Fish	103.4 140.0	111.6 148.7	120.4 142.9	112.7 140.5	118.2 163.5	11 <b>6.0</b> 137.5	120. <del>6</del> 142.0	113.9 143.6	116.9 144.2	110.0 143.6
Dairy products	101.6	102 2	1106	116.4	116.6	118.0	119.5	120.0	119.0	117.4
Processed fruits & vegetables	108.6	113.8	119.9	120.0	127.1	126.5	125.7	125.9	125.2	124.2
Shortening & cooking oil	103.9	118,8	116.6	114.8	127.0	128.7	127.7	129.8	127.0	122.7
Consumer finished goods less foods	100.7	103.1	108.9	1103	112.7	112.9	112.9	115.1	117.7	120.8
Beverages, alcoholic	110.3	111.8	115.2	114.5	117.7	117.5	117.7	118.7	117.3	117.4
Soft drinks Apparel	111.8 108.3	114.3 111.7	177.7 114.5	119.0 115.2	121. <del>6</del> 117.2	121.1 117.5	120.7	121.5	121.7	122.4
Footweer	109.3	115.1	120.8	122.5	125.8	125.5	117.5 128.0	117.7 125.8	117.8 12 <del>8</del> .3	118.0 126.1
Tobacco producte	154.6	171.9	194 8	200.4	217.4	224.1	224.3	224.3	225.0	224.8
Intermediate materials 2/	101.5	107.1	112.0	112.3	113.1	113.1	113.0	114.4	116.3	117.8
Materials for food manufacturing	100.8	106.0	112.7	113.1	120.4	120.9	121.0	120.5	118.8	117.2
Flour Refined sugar 3/	92.9	105.7 108.9	114.6	112.6	111.4	109.4	102.8	95.9	94.5	93.6
Crude vegetable oils	106.4 84.2	118.6	118.2 103.1	118.0 94.1	122.5 124.6	122.8 127.7	123.1 128.0	122.8 128.4	122.7 124.5	123.1 115.2
Crude materials 4/	93 7	96.0	103.1	102.1	104.7	101.0	101.2	110 2	115.1	124.6
Foodstuffs & fee detuffs	96.2	108.1	111.2	107.9	117.0	115.2	115.8	113.5	110.8	110.9
Fruits & vegetables 5/	108.8	108.5	114.6	114.3	103.6	106.9	116.3	106.8	103.0	107.9
Graine Livestock	71.1	97.9	108.4	98.2	108.6	110.4	103.1	92.1	883	85.B
Poultry, Ilve	102 0 101.2	103.3 121.5	106.1 128.8	104.6	120.5 128.2	117.8 118.5	114.7 134.7	117.8 122.1	113.3 128.9	118.5 110.2
Fibers, plant & animal	106.4	98.4	107.8	116.9	121.9	125.9	129.4	125.1	118.6	118.4
Fluid milk	91.8	89.4	98.8	107.6	100.3	103.1	104.7	106.5	106.0	98.4
Oilseeds Tobacco, leaf	99 2 85.7	134 0	123.8	101.7	110.5	112.2	114.8	114 8	116.5	118.8
Sugar, raw cane	110.2	87.2 111.9	93 8 115.5	95.0 118.0	95.7 11 <b>9.7</b>	95.7 119.3	95.7 119.7	93.7 119.6	100 9 119.7	98.3 1 <b>19.8</b>
All commodities	102.8	108.9	112.2	112.8	114.6	114.3	114.3	118.5	118.3	120.8
Industrial commodities.	102.5	108.3	111.6	112.4	113.5	1132	113.2	115.9	118.3	121.3
All foods 6/	107.8	111.5	117.8	118.3	123.8	123.5	124.2	124.1	122.9	123.0
Farm Products &										
processed foods & feeds	103.7	110.0	115 4	114.5	120.1	119.6	120.0	119.2	117.9	118.1
Farm products Processed foods & feeds 6/	95.5	104.9	110.9	107.8	113.7	113.6	113.7	111.5	109.0	109.8
Cereal & bakery products	107.9 112. <b>6</b>	112.7 123.0	117.8	117.9 132.4	123.5 135.1	122.8 134.7	123.3 133.9	123.1 133.8	122.4 133.4	122.2 134.2
Sugar & confectionery	112.6	114.7	120.1	120.1	122.8	123.0	123.9	123.7	123.9	123.0
Beverages	112.5	114.3	118.4	118.1	121.0	120.8	120.7	120.5	120.8	120.7

<sup>1/</sup> Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, Intermediate, & Processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Ann Duncan (202) 219-0313.

## Farm-Retail Price Spreads

Table 8.—Farm-Retall Price Spreads

		Annual		1989			- 1	990		
	1987	1988	1989 P	Oct	May	June	July	Aug	Sept	Oc
Market basket 1/									40.4	404.4
Retail cost (1982-84=100)	111.6	118.5	124.6	125.0	132.0	133.0	133.6	133.9	134.1	134.6 112.1
Farm value (1982-84=100)	97. t	100.5	107.1	105.1	114.1	114.7 142.9	114.3 144.0	114.0 144.7	111.7 146.2	146.8
Farm-retail spread (1982-84=100) Farm value-retail cost (%) Meat products	119.4 30.5	125.1 30.2	134.1 30.1	137.2 29.2	141.7 30.3	30.2	30.0	29.8	29.2	29.2
Retail cost (1982-84=100)	109.6	112.2	116.7	118.1	126.6	129.6	130.3	130.5	131.0	131.7
Farm value (1982-84=100)	101.2	99.5	103.3	100.9	119.9	122.3	118.9	120.2	114.9	119.0
Farm-retail spread (1982-84=100)	118.3	125.2	130.4	135.6	133.5	137.0	142.0	141.1	147.5	144.8
Farm value-retail cost (%) Dairy products	46.7	44.9	44.8	43 2	47.9	47.8	46.2	48.7	44.4	128 (
Retail cost (1982-84=100)	105.9	108.4	115.8	118.2	124.7	124.9	125.7 103.8	127.3 105.0	127. <b>6</b> 105. <del>0</del>	103.7
Farm value (1982-84=100)	93.3	124.7	99.1	104.6	99.2 148.2	147.0	145.9	147.8	147.9	151
Farm-retail spread (1982-84=100)	117.5	124.7	130 8 41.1	130.5 42.6	38.2	38.8	39.6	39.6	39 7	38.
Farm value-retail cost (%) outtry	42.3	40.1	41.1	42.0	30.2	36.0	00.0	30.0	00 1	
Retail cost (1982-84=100)	112.6	120.7	132.7	131.2	132.3	134.0	135.3	133.6	134.6	133.
Farm value (1982-84=100)	93 8	110.2	117.1	100.3	113.9	110.9	118.0	109.3	115.1	99
Farm-retail spread (1982-84=100)	134.2	132.8	150.6	166.7	153.5	160 6	154.5	181.8	157.1	173.
Farm value-retail cost (%)	44 6	48.9	47.2	40.9	48.1	44.3	46.9	43.8	45.7	39
gge							400.4	440.0	100.0	105
Hetail cost (1982-84=100)	91.5	93.6	118.5	122.9	115.0	112.2	109.1	119.6 100.0	120. <del>0</del> 105.9	125. 114.
Farm value (1982-84=100)	76.6	76.7	107.5	110.3	88.0	93.1 146.5	80.1 161.2	154.7	147.1	145.
Farm-retail apread (1982–84=100)	117.9 53.9	123.9 52.7	138.1 58.3	145.5 57.7	163.5 49.2	53.3	47.2	53.7	56.4	58.
Farm value-retail coet (%) Gereal & bakery products	33.0	32.7	36.3	37.7	40.2	56.5	47.2	00.7	00.7	
Retail Cost (1982-84=100)	114.8	122.1	132.4	135.0	139.3	140.1	140.5	141.4	141.6	141.
Farm value (1982-84=100)	71.0	92.7	101.7	98.7	98.9	94.9	89.8	85.5	81.5	78.
Farm-retail spread (1982-84=100)	120.9	128 2	136.7	140.1	144.9	146.4	147.6	149.2	150.0	150.
Farm value-retail cost (%)	7.6	9.3	9.4	9.0	8.7	8.3	7.8	7.4	7.0	Ø.
resh fruits						-70.0	4	.70 .	474.0	4 - 2
Retail cost (1982-84=100)	135.6	145.4	154.7	159.8	179.4	178.3	177.2	173.1	171.9 126.0	187. 131.
Farm value (1982-84=100)	113.0	118.5	108.3	125.5	123.4	124.1 203.3	124.5 201.5	119.7 197.7	193.1	183.
Farm-retail spread (1982-84=100)	145.7 28.5	158.7 25.3	17 <del>8</del> .1 22.1	175. <del>0</del> 24.8	205.2 21.7	22.0	22.2	21.8	23.2	24.
Farm value-retail cost (%) resh vegetables	20.5	25.9	22.1	24.0	21.7	22.0		21.0		
Retail costs (1982-84=100)	121.6	129.3	143.1	134.8	139.8	140.0	143.8	139.8	137.3	142.
Farm value (1982-84=100)	112.0	105 8	123.2	103.1	112.7	107.6	115.5	112.7	93.2	110.
Farm-retail spread (1982-84=100)	128.5	141.3	153.3	151.1	153.7	156.6	158.3	153.7	160.0	158.
Farm value-retail cost (%)	31.3	27.8	29.2	28.0	27.4	26.1	27.3	27.4	23.1	26
Processed fruits & vegetables										
Retail cost (1982-84=100)	109.0	117.6	125.0	125.0	134.1	134-6	134.8	135.0	135.0	134
Farm value (1982-84=100)	111.1	138.6	133.6	133.8	152 3	152.6	153.2	148.7	151.1	148. 130.
Farm-retail epread (1982-84=100)	108.3	111.7	122.3	123.4	128.4	129.0	129.1	130.7 26.2	130.0 26.6	28
Farm value-retail costs (%)	24.2	27.6	25.4	25.3	27.0	27.0	27.0	20.2	20.0	20
Fate & oils   Retail cost (1982–84=100)	108.1	113.1	121.2	121.6	125.0	125.5	126.6	127.4	128.2	128
Farm value (1982-84=100)	74.1	103.0	95.6	86.8	115.4	114.1	110.9	113 5	110.0	105
Farm-retail spread (1982-84=100)	120 8	118.8	130.6	134.4	128.5	129.7	132.4	132.5	134.9	136
Farm value-retail cost (%)	18.6	24.5	21.2	19.2	24.8	24.5	23.6	24.0	23.1	22
		Annual		1989				990		
Don't Obeles	1987	1988	1989 P	Oct	May	June	July	Aug	Sept	0
Beef, Choice Retail price 2//cts /lb.)	238.4	250 3	265.7	265.0	283.6	282.1	279 9	280.6	280.6	282
Retail price 2/ (cts./lb.) Wholesale value 3/ (cts.)	160.0	169.4	176.8	169.5	191.6	187.8	183.3	187.8	187.3	193
Net farm value 4/ (cts.)	138 7	148.3	157.6	152.1	167.2	163 9	160.5	166.7	166.8	171
Farm-retail spread (cts.)	99.7	102.0	108.1	112.9	118 4	118.2	119.4	113.9	113.8	111
Wholesale-retail 5/ (cts.)	78.4	80.9	88.9	95.5	92.0	94.3	96.6	92.8	93 3	89
Farm-wholesale 6/ (cts.)	21.3	21.1	19.2	17.4	24 4	23.9	22.8	21.1	20.5	21
Farm value-retail price (%)	58	59	59	57	59	58	57	59	59	
Pork Retail price 2/ (cts./lb.)	118.4	183.4	182.9	185.8	206.2	218.1	222.2	224.9	220 8	223
Wholesale value 3/ (cts.)	113 0	101.0	99.2	108.1	127.2	125.8	127.3	120.5	120.7	124
Net farm value 4/ (cts.)	82.7	69.4	70.4	75.6	99.5	96.9	99.2	90.4	88.0	91
arm-retail spread (cts.)	105.7	114.0	112.5	110.2	106.7	121.2	123.0	134 5	132.8	132
	75.4	82.4	83.7	79.7	79 0	92.5	94.9	104.4	100.1	98
Wholesale-ratal 5/ (CIS.)							00 1	20 1	32.7	33
Wholesale-retail 5/ (cts.) Farm-wholesale 6/ (cts.)	30.3	31.6	28.8 38	30.5 41	27. <b>7</b> 48	28.7 44	28.1 45	30.1 40	40	- 4

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. &/ Charges for livestock marketing, processing, & transportation.

Note. Choice beef series reflects August 1990 revisions.

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Table 9.—Price Indexes of Food Marketing Costs

		Annual			1989			1990	
	1987	1988	1989	H	IIf	fV:		HP	HIP
					1967=100°				
Labor—hourly earnings									
& benefits	361.1	370.1	379.5	378.9	378.6	382.6	388.8	392.0	391.8
Proceesing	370.2	362.0	390.3	390.4	389.6	392.4	400.7	404.1	404.4
Wholesaling	384.2	394.1	409.1	407.5	410.7	413.0	417.0	419.5	422.9
Retailing	341.7	347.7	355.€	354.7	353.3	359.3	364.3	387.7	365.3
Packaging & containers	329.8	350.7	364.6	364.7	366.1	365.2	367.1	367.3	366 5
Paperboard boxes & containers	288.0	308.1	323.7	323.2	325.5	326.9	328.7	324.1	322.3
Metal cens	433 0	442.3	443 2	438.1	448.2	448.2	450.9	456.3	456.3
Paper bage & related products	331.3	372.2	409.2	411.5	409.2	407.7	411.5	408.9	410.2
Plastic films & bottles	280.2	305.7	313.2	316.1	311.3	306.7	308.5	306.9	303 9
Glass containers	402.0	398.9	409 9	413.1	413.5	412.0	422.2	429.0	428.9
Metal foil	222.1	266.9	274.4	278.0	271.6	265.1	250.0	257.6	261.4
Transportation services	385.0	403.5	404.9	403.5	406.2	406.6	410.9	410.5	408.2
Advertising	381.1	384.7	409.1	407.4	412 8	417.6	425.3	429.6	435.1
Fuel & power	596.7	578.2	619.4	614.8	620.0	641 5	652.6	615.0	868 0
Electric	450.5	453 3	468 9	486.1	492.0	466.4	464.2	470.3	496.0
Petroleum	561 4	502.0	592.1	583.4	560.0	884.6	693 3	582 6	713.4
Natural gas	1.049.0	1,042.1	1,070.9	1.068.6	1,067.2	1,074.8	1,092.3	1,050.0	1,056.6
Communications, water & sewage	238.4	241.3	247.3	247.0	248.9	248.7	251,5	253 0	253.0
Rent	269.6	272.6	277.1	276.8	277.1	277.1	272.2	274.6	274.6
Maintenance & repair	382.6	395.9	410.7	408.9	412.9	416.2	421.1	425.2	428.2
Business services	349.0	364.€	388.3	386.6	389.9	393.9	399.0	403.3	407.2
Supplies	286.8	305.6	321.4	323.9	321 1	319.3	318.7	318,9	320.1
Property taxes & insurance	399.6	419.9	439.7	435.6	442.3	449.4	452.7	456.5	468.3
Interest, short-term	132.9	150.3	172.1	181 8	184.2	157.6	158.0	160.3	153 2
Total marketing cost index	360.4	372.4	384.8	383.9	385.1	388.3	393.4	393.9	396.6

<sup>&</sup>quot; indexes measure changes in employee earnings & benefits & in prices of supplies & services used in processing, wholesaling, & retailing U.S. farm foods purchased for at-home consumption. P = prefiminary.

information contact: Denis Dunham (202) 219-0870.

## **Livestock & Products**

Table 10.—U.S. Meat Supply & Use

							Cons	umption	Primary
	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exporta	Ending stocks	Total	Per capita 2/	market price 3/
			Mill	ion pounds 4/				Pounds	
Beef 1988	386	23.589	2,379	26,354	680	422	25.252	72.3	69,54
1989 1990 F 1991 F	422 335 350	23,087 22,792 23,113	2.175 2.330 2,270	25,684 25,457 25,733	1,023 1,035 1,055	335 350. 315	24,326 24,072 24,363	68.9 67.6 67.9	72.52 77-76 <b>75-81</b>
Pork 1988	360	15.684	1,137	17,181	195	437	16.549	63.5	43.39
1989 1990 F 1991 F	437 313 350	15,813 15,290 15,804	996 923 965	17,146 16,526 17,119	262 228 255	313 350 375	16.572 15,949 16.489	63.1 60.2 61.6	44.03 54-55 50-56
Veal 5/ 1988	4	398	27	427	To	5.5	412	1.4	89.85
1989 1990 F 1991 F	5 4 5	355 325 301	0	360 329 306	0	4 5 4	356 324 302	1.2 1.1 1.0	91.84 96–97 95–101
Lemb & mutton 1988	6	335	51	394	1	ě	387	1.4	68.26
1989 1990 <del>F</del> 1991 F	6	347 367 369	63 51 55	416 428 432	2 2 2	8 8 7	406 416 423	1.5 1.5 1.5	67.32 58-57 54-80
Total red meat	750	40 004	2 504	44.250	000	870	42,600	138.€	_
1988 1989 1990 F 1991 F	758 870 660 713	40,004 39,602 38,774 39,587	3,594 3,134 3,304 3,290	44.356 43,606 42,738 43,590	888 1.287 1.265 1,312	660 713 701	41,660 40,760 41.577	134.7 130.4 132.1	=
Broders		(a.e.=	•			40	45.440	<b>an a</b>	56.3
1988 1989 1990 F 1991 F	25 36 38 30	16,187 17,428 18,639 19,606	0 0	16.212 17.464 16.678 19.636	765 814 1,123 1,140	36 38 30 30	15.410 16.612 17,525 18,468	62.6 66.8 69.8 73.0	59.0 54-55 51-57
Mature chicken	400	000		821	26	157	639	2.6	
1986 1989 1990 F 1991 F	188 157 199 200	633 575 583 581	000	731 772 791	24 27 26	189 200 200	518 546 555	2.1 2.2 2.2	_
Turkeys 1988	266	2.000	0	4,228	51	250	3.926	15.9	61.2
1989 1990 F 1991 F	250 236 275	3.960 4.276 4,671 4,927	0	4.526 4,906 4,202	41 47 45	236 275 250	4.250 4.585 4.907	17.1 18.3 19.4	66.7 63-64 61-67
Total poultry	275	7.027		1,202			4.22		
1988 1989 1990 F	479 442 463	20,780 22,260 23,893	0	21,259 22,722 24,357	842 876 1,196	442 463 505	19,975 21,380 22,656	81.1 85.9 90.3	=
1991 F	505	25,114	0	25,619	1,211	460	23,926	94.6	
Red meat & poultry 1988	1,237	80,784	3,594	65,615	1,728	1.312	62.574	219.6	_
1989 1990 F 1991 F	1.312 1.123 1.216	61,862 62,667 64,701	3,134 3,304 3,290	66.328 67,094 69,209	2,165 2,461 2,523	1,123 1,218 1,181	63,040 63,415 65,505	220.6 220.7 226.7	_

f/Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcase-to-retail conversion factor was .71 for 1987, & 70.5 for 1988-90.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork; barrows and gifts, 7 markets; yeal; farm price of calves; lamb & mutton; Choice slaughter lambs, San Angelo; broilers; wholesale 12-city average; turkeys; wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 year trade no longer reported separately. F = forecast. --- = not available.

information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

		Pro-						Consur		
	Beg. stocks	duc- tion	lm- ports	Total supply	Ex- ports	Hatch- ing use	Ending stocks	Total	Per capita	Wholesale price*
			М	illion dozen						Cts./doz.
1986 1987 1988 1989 1990 F 1991 F	10.7 10.4 14.4 15.2 10.7 12.0	5,766.3 5,868.2 5,783.5 5,586.8 5,659.6 5,715.0	13.7 5.6 5.3 25.2 11.2 8.0	5,790.7 5,884.2 5,803.2 5,627.1 5,681.5 5,735.0	101.6 111.2 141.8 91.6 89.0 98.0	586.8 599.1 805.9 842.8 679.2 720.0	10.4 14.4 15.2 10.7 12.0 12.0	5,111.9 5,159.5 5,040.3 4,882.1 4,901.2 4,905.0	253.8 253.8 245.5 235.5 234.3 232.6	71,1 61.6 62.1 81.9 80-84 73-77

<sup>\*</sup> Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use1

				Comr	nercial		Tetal		Comme	ercia!	A11
	Pro- duc- tion	Farm use	Farm market- ings	Beg.	lm-	Total commer- cial supply	CCC net re- movale	Ending stocks	Disap- pear- ance	All milk price 2/	
					Billion pour	nde					
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61	
1983	139.6	2.4	137.2	4.6	26	144.4	16.8	5.2	122.4	13.58	
1984	135.4	2.9	132.4	5 2	2.7	140.4	8.6	4.9	126.8	13,46	
1985	143.0	2.5	140.6	4.9	2.8	148.3	13.2	4.6	130.5	12.75	
1986	143.1	2.4	140.7	4.6	2.7	148.1	10.6	4.2	133.3	12.51	
1987	142.7	2.3	140.5	4.2	2.5	147.1	6.7	4.6	135.8	12.54	
1988	145.2	2.2	142.9	4.6	2.4	150.0	8.9	4.3	136.8	12.24	
1989	144.3	2.1	142.2	4.3	2.5	148 9	9.0	4.1	135.8	13.54	
1990 F	148.3	2,1	146.2	4.1	2.7	153.1	8.3	4.6	140.2	13.75	

<sup>1/</sup> Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants & dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

		Annual		1989				1990		
m -h	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Brollers										
Federally inspected staughter, certified (mil. lb.)	45 700 5	404044	47.004.0	4 407 4					4 .04 .	4 750 6
Wholesale price.	15.502 5	16,124.4	17,334.2	1,497.1	1.635.1	1,532.9	1.510.0	1,691.9	1.421.4	1,752.6
12-city (cts/lb.)	47.4	56.3	59.0	51.7	57.0	56.4	59.5	54.0	67.4	40.0
Price of grower feed (\$/ton)	188	220	237	223	220	220	224	54.9 221	220	48.8 207
Broiler-feed price ratio 1/	3.1	3.1	3.0	2.7	3.2	3.1	3.3	3.0	3.2	2.8
Stocks beginning of period (mif. lb.)	23.9	24.B	35.9	35.9	32.9	30.9	30.0	34.3	25.9	23.0
Broiler-type chicks hatched (mil ) 2/	5.379.2	5,602.4	5.944.3	484.4	553.7	540.9	541.0	540.8	508.8	510.3
Turkeys										
Federally inspected elaughter,										
certified (mli. lb.)	3.717.1	3,923.4	4,174.8	422.6	384.1	389.2	395.7	444.0	382.9	477.1
Wholesale price, Eastern U.S.,										
8-16 ib. young hens (cts./lb.)	57,8	61.2	66.7	67.8	61.3	62.9	63.4	66.6	69.0	78.2
Price of turkey grower feed (\$/ton)	213	243	251	243	239	239	240	235	239	234
Turkey-feed price ratio 1/	3.2	3.0	3.2	3.2	3.2	3.2	3.2	3.4	3.4	3.6
Stocks beginning of period (mil. lb.)	178.2	256.2	249.7	589.3	354.4	405.6	489.3	541.7	593.1	B20 4
Poults placed in U.S. (mit.)	264.2	261.4	289.0	20.2	29.0	29.2	29.0	25.6	19.7	21.5
Eggs										
Farm production (mil.)	70.418	69,402	67,041	5,648	5,765	5.536	5,699	5,711	5,528	5,784
Average number of layers (mil.) Rate of lay (eggs per layer	284	277	269	268	270	268	266	267	268	270
ou (stus)	248	251	250	21.0	21.4	20.7	21.5	01.4	20.6	01.4
Cartoned price, New York, grade A	2,40	231	250	21.0	21,4	20.7	21.5	21.4	20.6	21.4
large (cts./doz.) 3/	81.6	62.1	81.9	84.8	67.9	73.6	70.9	80.3	82.2	88.5
Price of laying feed (\$/ton)	169	202	208	200	197	224	208	205	204	199
Egg-feed price ratio 1/	6.3	5.3	8.7	7.2	6.1	5.6	5.4	6.4	6.7	7.4
Stocks, first of month										
Shell (mll. doz.)	0.66	1.29	0.27	0.69	0.60	0 63	0.68	0.87	0.57	0.54
Frozen (mil. doz.)	0.8	13.1	14.9	10.9	13.1	12.8	13.7	13.0	13.0	12.6
Replacement chicks hatched (mil.)	428	366	384	33.3	37.7	34.5	31.7	33.0	32.7	32.1
			4.04		40.0				- C	

<sup>1/</sup> Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy\_

		Annual		1989				1990		
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Milk prices, Minnesota-Wisconsin. 3.5% lat (\$/cwt) 1/	11.23	11.03	12.37	13.87	12.78	13.28	13.43	13.09	12.50	10.48
Wholesale prices Butter, grade A Chi. (cts./lb.)	140.2	132.5	127.9	120.5	99.0	98.4	100.3	98.9	98.9	98.8
Am. cheese, Wie. assembly pt. (cts./lb.) Nontat dry milk (cts./lb.) 2/	123.2 79.3	123.8 80.2	138.6 105. <b>5</b>	160.3 139.9	145.7 1 <b>2</b> 5.4	149.5 129.2	151.0 125.2	150.3 112.1	142.6 92.0	114.9 88.6
USDA net removals Total milk equiv, (mil, lb.) 3/ Butter (mil, lb.) Am. cheese (mil, lb.) Nonfat dry milk (mil, lb.)	6,708.0 187.3 282.0 559.4	8,856.2 312.6 238.1 267.5	8,967.9 413.4 37.4 0	158.4 7.4 0 0	1,014.2 48.9 0	640.6 23.9 0	467.8 15.5 0	324.5 15.6 0 0	119.2 6.8 0 16.9	249.9 11.6 0 22.6
Milk prod. 21 States (mli. lb.) Milk per cow (lb.) Number of milk cows (1.000) U.S. milk production (mil. lb.)	121,431 13,969 8,693 142,709	123,518 14,291 8,643 145,162	122,531 14,370 8,527 144,252	9,878 1,161 8,510 6/ 11,661	11,226 1,319 8,513 6/ 13,229	10,696 1,257 8,512 6/ 12,605	10,695 1,257 8,511 6/ 12,587	10,479 1,229 8,523 6/ 12,333	10,019 1,173 8,540 6/ 11,791 8	10.238 1,199 8,541 / 12,086
Stock, beginning Total (mil. lb.) Commercial (mil. lb.) Government (mil. lb.) Imports. total (mil. lb.)	12.867 4,165 8,702 2,4 <del>9</del> 0	7,440 4,646 2,794 2,394	8.234 4.289 3,945 2,499	12,138 5,258 6,881 237	11.418 5.145 6.272 216	12,465 5,383 7,082 258	13,241 5,495 7,746 233	13,452 5.653 7,799 208	13.451 6,607 7,844 222	12,982 6,355 7,628
Commercial disappearance (mil. ib.)	135,7 <b>54</b>	136,805	135.843	11.927	12.018	11,940	12,019	12,087	11,976	
Butter Production (mil. lb.) Stocke, beginning (mil. lb.) Commercial disappearance (mil. lb.)	1,104.1 193.0 902.5	1,207.5 143.2 909.8	1,273.5 214.7 854.1	95.1 407.9 87.3	120.5 349.1 68.9	95.9 392.2 80.2	85.1 417.2 71.6	83.8 418.1 66.7	84.8 423.9 86.2	105.0 408.6
American cheese Production (mil. lb.) Stocke, beginning (mil. lb.) Commercial disappearance (mil. lb.)	2,716.7 697.1 2,437.1	2,756.6 370.4 2,570.0	2,672.6 293.0 2,681.6	209.2 276.8 231.4	264.7 299.6 251.8	252.5 314.1 237.0	236,4 333,1 214,7	229.3 357.8 232.0	220.5 356.5 230.2	236.9 347.4
Other cheese Production (mil. 1b.) Stocks, beginning (mil. 1b.) Commercial disappearance (mil. 1b.)	2.627.7 92.0 2.880.2	2.815.4 89.7 3.034.6	2,941.3 104.7 3.208.9	254 9 98.8 299.7	280.8 112.7 297.7	276.3 119.5 293.2	266.2 129.1 296.9	258.6 124.0 290.6	258.2 117.0 285.0	266.8 111.1
Nonfat dry milk Production (mll. lb.) Stocks, beginning (mll. lb.) Commercial disappearance (mil. ib.)	1,056.8 686.8 492.9	979.7 177.2 734.3	874.7 53.1 873.0	48.2 44. <b>6</b> 56.9	95.1 62.8 87.6	83 3 70.8 61.0	72.7 93.3 57.7	62.9 108.7 48.0	60.6 123.6 42.2	55.2 121.2
Production (mil. gal.) 4/	1,260.7	1,248.0	1,214.0	89.7	114.2	119.0	126 3	118.0	94.0	91.3
		Annual				1989			1990	
	1967	1988	1969		- 11	111	IV	I P	IIP	III F
Milk production (mil. lb.) Milk per cow (lb.) No. of milk cows (1,000) Milk-leed price ratio 5/ Returns over concentrate 6/	142,709 13.819 10.327 1.84 9.52	145,152 14,145 10,262 1,58 9,05	144.252 14,244 10,127 1 64 10.08	38,445 3,586 10,164 1,56 9,69	37,702 3,727 10,116 1,48 8,96	3,484 10,101 1.63	34,917 3,448 10,127 1.92 12,16	36,940 3,844 10,137 1.82 11.30	38,611 3,813 10,126 1 89 10.27	36,711 3,616 10,144 1,76 10,96

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sharbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: Laverne T. Williams (202) 219-0770.

Table 15.-Wool \_

		Annual			1989			1990	
	1987	1988	1989	11	1))	īv	1	I	111
U.S. wool price, (cts./lb.) 1/	265	438	370	372	350	328	289	272	237
Imported wool price, (cts./lb.) 2/	247	372	354	322	309	316	327	312	271
U.S. mill consumption, ecoured 3/									
Apparel wool (1,000 lb.)	129,677	117.069	112,998	29,991	25,983	24,921	29.948	29.998	25.431
Carpet wool (1,000 lb.)	13,092	15.633	14.122	3,979	3.865	2.984	3,779	2,923	4,088

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20 60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis. Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. 3/ Beginning 1990 mill consumption reported only on a quarterly basis.

— = not available.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

		Annual		1989				1990		
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Cattle on feed (7 States)	7.050				0.404	7.007	7.040	7.000		
Number on feed (1.000 head) 1/ Placad on feed (1.000 head)	7,953 21,040	8.411 20.654	8.045 20.834	6.9 <b>58</b> 2,65 <b>2</b>	8,181 1.632	7,867 1,340	7.310	7.003 1,735	6.990 2,214	7.680 2.751
Marketings (1,000 head)	19,545	19,016	19.422	1.626	1,796	1.824	1,750	1,666	1,445	1,605
Other disappearance (1.000 heed)	1,217	1.202	1.079	71	150	73	77	82	79	87
Beef eteer-corn price ratio.										
Omaha 2/	41.0	31.5	30.3	31.1	29.3	27.9	28.5	30.9	34.5	36.5
Hog-com price ratio. Omaha 2/	32.8	19.0	18.4	20.8	23.6	22.4	23.9	23.1	25.1	27.0
Market prices (\$/cwt) Slaughter cattle										
Choice Steers, Omaha	64 60	69.54	72.52	69.69	77.57	75.63	74.46	76.22	75.75	77.50
Utility cows. Omaka	44.83	48.55	47.86	49.42	55.41	56.04	54.56	56.07	54.33	51.10
Feeder canle	75.00		00.10							
Choice, Kansas City, 600-700 lb.	75.36	83 67	86.13	88.25	91.90	94.13	93.50	92.30	91.50	NQ
Staughter hogs Barrows & gitts, 7-markets	51.69	43 39	44.03	47.15	62.18	60.75	61.87	50.05	55.10	57.15
Feeder pigs	90.10	42 38	44.03	47.19	02.10	60.75	01.07	56.05	59.10	57.15
S. Mo. 40-50 lb. (per head)	46 69	36.06	33.63	37.25	56.60	47.32	46.35	45.85	45.91	52.33
Slaughter sheep & lambs										
Lamba, Choice, San Angelo	78 09	68 26	67.32	59.63	62 25	53.56	53.25	51.20	51.75	62.50
Ewes, Good, San Angelo Feeder lambs	38.62	38.68	38.58	28.00	33.25	32.38	34.83	38.60	32.88	32.00
Choice, San Angelo	102.26	90.89	79.85	74 88	64.30	56.50	53.75	58.30	55.75	55.90
Wholesale meat prices, Midwest										
Boxed beef cut-out value	103 84	110.50	114.78	110.04	124.56	121.53	118.54	121.52	121.18	124.96
Canner & cutter cow beef	85.26	87.77	94.43	98.14	101.29	101.51	101.62	105.22	101.93	102.58
Pork loins, 14-18 lb. 3/ Pork bellies, 12-14 lb.	106.23 63.11	97.49 41.25	101.09 34.14	111.78 36.88	136. <b>06</b> 61.48	125. <del>6</del> 2 65.15	144.14 53.18	119.56 51.08	121.64 51.31	113.71 58.83
Hame, skinned, 14-17 lb.	80.96	71.03	69.39	80.56	81.60	NQ	91.00	NO	101.75	107.24
All tresh beef retail price 4/	212.64	224.81	238.97	241.20	251.52	254.05	255.75	254.71	256.39	259.36
Commarcial slaughter (1,000 head)*										
Catila	35,647	35,079	33,917	2,964	2,989	2.934	2.852	2,983	2.614	2.960
Steers Heilers	17.443 10.906	17,344 10,754	16,538 10,408	1,372	1,547 894	1,518 913	1.450 910	1,508 926	1.275 841	1.400
Cows	6.610	6.337	6.316	596	490	448	439	486	443	580
Buile & stage	689	644	659	64	58	55	53	63	55	61
Calves Sheet & lemba	2.815 5.199	2.506	2.172 5.464	198 4 <b>84</b>	142 478	137 440	144 447	152	138 439	162 507
Sheep & lambs Hogs	81,081	5.293 87.795	88,693	8.032	6.976	6.322	6.154	7, <b>30</b> 1	6,896	7,739
Commercial production (mil. lb.)										
Beet	23,405	23.424	22,974	2,041	2.007	1,979	1,939	2.082	1.813	2.042
Veal	416	387	344	31	26	25	26	28	26	31
Lamb & mutton Pork	309 14,312	329 15. <b>62</b> 3	341 1 <b>5.759</b>	1,421	31 1.256	28 1,142	28 1.102	30 1,309	1,228	1,389
		Annual			1989				990	
	1097	1988	1989			IV		[]	[1]	IV
	1987	1968	1969	11	113	10		1.1	UI	IA
Cattle on feed (13 States) Number on feed (1,000 head) 1/	9.555	10,114	9,688	9.918	8,680	8.276	9,943	10.063	8,761	9,102
Placed on feed (1,000 head)	25,074	24,423	24,484	5,212	5,719	7,321	6,088	5,111	6,343	-
Marketings (1,000 head)	23,126	23,459	22,955	6,040	5,896	5,361	5,583	6,013		5,495
Other disappearance (1,000 head)	1.389	4,390	1,274	410	227	293	385	400	261	_
Hoge & pigs (10 States) 5/	20 700	40.075	42.040	44 PEE	44.000	45 000	40 200	40 400	42 000	44.445
Inventory (1,000 head) 1/ Breeding (1,000 head) 1/	39.730 5.125	42.675 5.435	43.210 5.335	41,655 5,440	44,020 5.565	45.200 5.335	42.200 5.280	40.190 5.250	42,800 5,440	44,410 5,340
Market (1,000 head) 1/	34.605	37,240	37.875	36,215	38,455	39,865	36,920	34,940	37,360	39,070
Farrowings (1,000 head)	8,853	9.370	9.203	2,580	2.324	2.190	2.013	2.458		2,252
Pig crop (1,000 head)	68.955	72.268	71,807	20.309	18.167	16.890	15.748	19.576	17,922	_

<sup>1/</sup> Beginning of period. 2/ Bushels of corn equal in value to 100 pounds five weight. 3/ Prior to 1984, 8–14 lb.; 1984 & 1985, 14–17 lb; beginning 1986, 14–18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year–Feb. (I), Mar.–May (II), June–Aug. (III), & Sept–Nov. (IV). 6/ Intentions.
\*\*Classes estimated. NQ = not quote. --- = not available.

Note: \*This series replaces the Choice steer beef price, 600-700 1bi, which was discontinued with the June number." The new number is the value of Choice beef from a yield grade 1-3, 550-700 lb. carcass.

Information contact: Polly Cochran (202) 219-0767.

# **Crops & Products**

Table 17.—Supply & Utilization 1.2

		Area					Feed	Other				
	Set seide 3/	Planted	Herveel- bel	Yield	Produc- tion	Total supply 4/	and resid- ual	domes- tio use	Ex- ports	Total use	Ending stocks	Farm price 5/
		Mil. acres		Bul/acre				Mil. bu.				\$/bu,
Wheat 1985/86 1986/87 1987/88 1988/89* 1989/90*	18.8 21.0 23.9 22.5 9.6 7.1	75.6 72.1 65.8 65.5 76.6 77.3	64.7 60.7 66.0 63.2 62.1 69.4	37.5 34.4 37.7 34.1 32.8 39.5	2,424 2,091 2,108 1,812 2,037 2,744	3.865 4.017 3.945 3.096 2.762 3.303	284 401 280 167 160 450	767 796 806 818 832 833	909 999 1,598 1,419 1,233 1,075	1,960 2,196 2,684 2,394 2,225 2,368	1.905 1.821 1.261 702 536 937	3.08 2 42 2 57 3.72 3.72 2.50–2.70
Dies		Mil. acres		Lb Jacre				Mil. cwt (rough a	quiv.)			\$/cwt
Rice 1985/86 1985/87 1987/88 1988/89 1989/90* 1989/90*	1.24 1.48 1.57 1.09 1.21 1.03	2.61 2.38 2.38 2.93 2.73 2.87	2,49 2,36 2,33 2,90 2,69 2,81	5.414 5.651 5.555 5.514 5.749 6.629	134.9 133.4 129.6 159.9 164.5 158.1	201.8 213.3 184.0 195.0 185.4 189.1	=	6/ 65.8 6/ 77.7 6/ 80.4 6/ 82.3 6/ 82.4 6/ 88.8	56 7 84.2 72.2 85 9 76.8 74.0	124.5 161.9 152.6 168.2 159.2 162.8	77.3 51.4 31.4 26.7 26.3 26.3	6.53 3.75 7.27 6.63 7.30 6.25-7.25
Corn		Mil. ecree		Bu./eore				Mil bu.				\$/bu.
1965/88 1965/87 1967/88 1968/89* 1969/90* 1990/91*	5.4 14.3 23.1 20.5 10.8 10.1	83 4 76.7 65.2 67.7 72.3 74.5	75.2 68.9 69.5 68.3 64.8 66.7	118.0 119.4 119.8 84.6 118.2 119.0	6,875 6,226 7,131 4,929 7,527 7,935	10,534 12,267 12,016 9,191 9,480 9,281	4.107 4.701 4.812 3,987 4,458 4.700	1.180 1.192 1,229 1,245 1,290 1,320	1.227 1.492 1.716 2.028 2.367 2.025	6,494 7,325 7,757 7,260 8,115 8,045	4,040 4,882 4,259 1,930 1,344 1,238	2.23 1.50 1.84 2.64 2.36 2.20-2.50
0		Mil. acres		Bu./acr●				Mil. bu.				\$/bu.
Sorghum 1985/86 1986/87 1987/88 1986/89* 1989/90* 1990/91*	0.9 3.0 4.1 3.9 3.3 3.0	16.3 15.3 11.6 10.3 12.6 10.7	18 8 13.9 10.5 9.0 11.2 9.3	66.8 67.7 69.4 63.8 55.4 60.5	1,120 938 731 577 618 560	1,420 1,489 1,474 1,239 1,058 780	564 535 555 468 516 440	28 12 25 22 15	178, 198 231 310 607 225	869 746 811 800 838 680	551 743 663 440 220 100	1.93 1.37 1.70 2.27 2.10 2.06–2.35
Barley		Mit. acres		Bu./acre				Mil. bu.				\$/bu.
1985/86 1986/87 1987/88 1988/89* 1989/90* 1990/91*	0.7 2.1 2.9 2.8 2.3 2.6	13.2 13.1 11.0 9.8 9.2 8.3	11.6 12.0 9.9 7.6 8.3 7.6	51.0 50.8 52.4 38.0 48.6 55.2	591 611 521 290 404 419	848 944 869 622 615 595	333 298 254 166 185 175	189 174 174 180 180 185	22 137 120 79 69 85	523 608 548 425 454 445	325 336 321 199 161 150	1.98 1.61 1.81 2.80 2.42 2.10-2.30
0.44		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
Oate 1985/85 1986/87 1987/88 1988/89* 1989/90* 1990/91*	0.1 0.0 0.8 0.3 0.4 0.2	13.3 14.7 18.0 13.9 12.1 10.4	8.2 6.9 6.9 5.5 6.9 6.0	63.7 56.3 54.0 39.3 54.3 60.2	521 386 374 218 374 358	728 803 552 393 544 576	460 395 368 194 271 330	82 73 81 100 115 120	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	544 471 440 294 387 451	184 133 112 98 157 125	1.23 1 21 1.58 2.51 1.49 1.10-1.20
Soybean#		MII, acres		Bu./acre				Mil. bu.				\$/bu.
1985/86 1986/87 1987/88 1988/89* 1989/90* 1990/91*	0000	63.1 60.4 68.2 56.8 60.8 57.7	61.6 56.3 57.2 57.4 59.5 56.5	34.1 33.3 33.9 27.0 32.3 33.7	2,099 1,940 1,938 1,549 1,924 1,904	2.415 2.476 2.374 1.855 2.109 2.145	0	1,053 1,179 1,174 1,058 1,148 1,195	740 757 802 527 623 590	1,879 2,040 2,072 1,673 1,870 1,880	536 436 302 182 239 265	5.05 4.78 5.88 7.42 5.70 5.25-6.25
Southern fill								Mil. Ibe.				7/ Cts./lb.
Soybean oil 1985/86 1986/87 1987/88 1988/89* 1989/90* 1990/91*	7,			1	11,617 12,783 12,974 11,737 13,004 13,280	12.257 13.745 8/ 14.895 8/ 13.967 8/ 14.741 8/ 14.600		10.053 10.833 10.930 10.591 12,083 12,000	1,257 1,187 1,873 1,861 1,353 1,250	11.310 12,020 12.803 12.252 13,436 13,250	947 1.725 2,092 1.715 1.305 1.350	18.00 15.40 22.65 21.10 22.30 20.0—23.0
Soybean meal								1.000 tons				9/ \$/ton
1985/88 1986/87 1987/88 1988/89" 1989/90" 1990/91"		=	11111	11111	24,951- 27,758 28,080 24,943 27,719 28,477	25.338 27.970 26.300 25,100 27.898 28.800	=	19,090 20,387 21,293 19,639 22,550 23,000	6.036 7.343 6.854 5,288 5,030 5,500	25.126 27.730 28.147 24.927 27.580 28,500	212 240 153 173 318 300	155 163 222 233 174 180–185
See footnotes s		ble.			-4,711	201000		_51000	_,			

## Table 17.—Supply & Utilization, continued

	Set Aside 3/	Area Planted	Harves- ted	Yield	Produc- tion	Total supply	Feed and reaid- ual	Other domes- tic use	Ex- ports	Totel uee	Ending Stocks	Farm price 5/
Cotton 10/		Mil. acres		Lb Jacre				Mil. bales				
1985/88 1986/87 1987/88 1988/89* 1989/90* 1990/91*	3.6 4.2 3.9 2.2 3.5 1.9	10.7 10.0 10.4 12.5 10.6 12.3	10.2 8.5 10.0 12.0 9.5 11.5	630 552 706 619 614 641	13.4 9.7 14.8 15.4 12.2 15.4	17.6 19.1 19.8 21,2 19.3 18.4		6.4 7.4 7.8 7.8 8.8 8.4	2.0 8.7 6.5 6.2 7.7 7.5	8.4 14.1 14.2 13.9 16.5 15.0	9.4 5.0 5.8 7.1 3.0 2.6	58.50 52.40 64.30 56.60 65.80

\*December 11, 1990 Supply and Demand Estimates: 1/ Marketing year beginning June 1 for wheat, barley, & date, August 1 for cotton & rice, September 1 for soybeans, corn, & sorphum, October 1 for soymasi & soyoil. 2/ Conversion factors: Hectars (he ) = 2.471 acres, 1 metric ton = 2204.622 pounds; 38.7437 bushels of wheat or soybeans, 39,3879 bushels of corn or sorghum, 45.9296 bushels of barley, 88.8944 bushels of oats, 22.046 cwt of rice, and 4.59.480-pound balles of cotton, 3/ includes diversion, PIK, acreage reduction, 50-92, & 0-92 programs. 4/ includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Average of crude soybean oil, Decatur. 8/ includes 199 million pounds in imports for 1987/88, 138 million in 1989/89, & 50 million in 1989/90, & 50 million in

Information contact: Commodity Economics Division, Crops Branch (202) 21g-0840.

Table 18.—Food Grains

		Marketii	ng year 1/		1969			1990		
Wholesale prices Wheat, No. 1 HRW,	1985/88	1986/87	1987/88	1968/69	Oct	June	July	Aug	Sept	Oct
Kaneas City (\$/bu ) 2/ Wheat, DNS,	3.28	2.72	2.98	4.17	4.28	3.60	3.11	2 89	2.83	2,81
Minneapolié (\$/bu.) 3/ Rice, S.W. La. (\$/cwt) 4/ Wheat	3.94 16.11	3.07 10.25	3.15 19.25	4,38 14,65	4.11 15 80	3.98 15.65	3.56 15.30	3.05 14.65	2,84 13.95	2 85 13.75
Exports (mll. bu ) Mill grind (mill bu ) Wheat flour production (mil. cwt) Rice	915 703 314	1,004 755 335	1,592 753 <b>338</b>	1,424 778 348	93 67 30	89 81 27	83 62 28	96 74 33	109 67 30	
Exports (mil. cwt, rough equiv.)	58 7	84.2	72.2	85.9	8.1	4.1	3.2	4.5	6.6	
		Marketing yes	ar 1/		1989				1990	
Wheat	1986/87	1987/88	1988/89	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov
Stocke, beginning (mil. bu.) Domestic use	1,905	1.821	1,261	1,227.7	701.6	1,917.2	1,423.7	943.1	538.5	2.402.0
Food (mil. bu.) Seed, feed & residual (mil. bu.) 5/ Exports (mil. bu.)	712 485 999	721 385 1,596	715 260 1,419	165.0 -2.8 368.0	163.1 273.9 369.9	183.1 12.8 328.6	180.5 44.9 259.7	184.3 -44.9 274.8	197.4 419.5 258.1	Ξ

<sup>1/</sup> Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, mitted basis. 5/ Residual includes feed use. — = not available. NQ = no quote.

Information contacts: Ed Ailen & Janet Livezay (202) 219-0840.

Table 19.—Cotton

		Market	ling year 1/		1989			1990		
U.S. price, SLM.	1985/86	1986/87	1987/88	1988/89	Oct	June	July	Aug	Sept	Oct
1-1/16 in. (cts./lb.) 2/ Northern Europe prices	60.0	53.2	63.1	57.7	89.4	77.1	79.5	76.3	71.0	70.5
Index (cta./fb.) 3/ U.S. M 1-3/32 in. (cta./fb.) 4/	48.9 64.8	62.0 61.8	72.7 78.3	66.4 69.2	82.10 83.31	90.3 92.7	90 9 95.9	81.0 80. <b>5</b>	81.4 81.7	81.5 82.4
U.S. mill consumpt. (1,000 bales) Exports (1,000 bales) Stocks, beginning (1,000 bales)	6,399 1,969 4,102	7,452 6,684 9,348	7.817 6,582 5.028	7,782 8,148 5,771	792 522 5.514	723 538 5,287	841 440 3,923	829 544 3,000	692 412 2,224	805 3,203

1/ Beginning August 1, 2/ Average spot market. 3/ Liverpool Cotlook (A) index; average of five lowest priced of 11 selected growths. 4/ Memphis territory growths. —= not available.

Information contact: Scott Sanford (202) 219-0840.

Table 20.—Feed Grains

										-
		Marke	ting year 1/		1989			1990		
	1985/86	1986/87	1987/88	1988/89	Oct	June	July	Aug	Sept	Oct
Wholesele prices Corn, no. 2 yellow, 30 day,									0.00	20.04
Chicago (\$/bu.)	2.35	1.64	2.14	2.68	2.36	2.84	2.73	2.52	2.33	2 24
Sorghum, no. 2 yellow, Kanaas City (\$/cwt) Barley, feed,	3.72	2.73	3.40	4.17	3.91	4.54	4 82	4.27	3.89	3.79
Duluth (\$/bu.) 2/	1.53	1,44	1.78	2.31	2.10	2.39	2.17	1.99	2:01	2.11
Barley, malting, Minneapolis (\$/bu.) Exports 3/	2.24	1.89	2.04	4.11	3.48	2.92	2.38	2.35	2.32	2 30
Corn (mil. bu.) Feed graine (mil. metric tons) 4/	1,241 36.6	1,504 46.3	1,723 52.3	2.036 61.3	175 5.3	201 5.6	148 4.3	153 4.7	1 <b>06</b> 3.2	108 3.5
		Marketi	ng year 1/		1	989			1990	
	1985/86	1986/87	1987/88	1988/89	June-Aug	Sept-Nov	Dec-Feb	Маг-Мау	June-Aug	Sept-Nov
Corn Stocke, beginning (mil. bu.) Domestic use	1,648	4.040	4.882	4.259	3,419	1,930	7,079	4,813	2.839	1,344.5
Feed (mil. bu.) Food, seed, ind. (mil. bu.)	4,095 1,160	4.714 1,192	4.805 1.229	3.979 1,245	890 330	1,499 298	1.290 295	1,022 351	689 336	_
Exports (mil. bu.)	1,241	1.504	1.723	2.036	470	582	682	801	485	_
Total use (mil. bu.)	6.496	7,410	7,757	7,260	1,490	2.379	2,267	1,974	1,510	

<sup>1/</sup> September 1 for corn & sorghum: June 1 for cats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Includes products. 4/ Aggregated data for corn, sorghum, cats, & barley. —= not available.

Information contact: James Cole (202) 219-0840

Table 21.—Fats & Oils

		Marke	ting year *			1989			1990	
	1985/86	1986/87	1987/88	1988/89	Aug	Sept	June	July	Aug	Sept
Soybeane Wholesale price, no. 1 yellow, Chicago (\$*bu.) Crushings (mil. bu.) Exports (mil. bu.) Stocks, beginning (mil. bu.)	5.20	5.03	6.67	7.41	5.98	5.80	6.01	6.05	6.06	6.19
	1.052.8	1,178.8	1,174.5	t,057.7	75.9	18.0	.91.9	92.2	92.8	92.1
	740.7	758.9	801.6	530.8	18.3	74.1	35.2	20.8	28.3	29.3
	316.0	536.4	436.4	302.5	31.0	23.8	67.5	58.8	46.9	45.2
Soybean oil Wholesale price, crude, Decatur (cts./lb.) Production (mil. lb.) Domestic disap. (mil. lb.) Exporte (mil. lb.) Stocks, beginning (mil. lb.)	18.02	15.36	22.67	21,09	18.1	18.8	24.9	23.5	25.0	24.5
	11.617.3	12,783.1	12.974.5	11,737.0	855.0	843.0	1,035.8	1,038.0	1.059 2	1,038.1
	10,045.9	10.820.2	10,734.1	10,455.6	1,031.3	931.6	1,003.1	903.9	1,029.8	795.1
	1.257.3	1,184.5	1,873.2	1,658.2	181.1	265.6	161.9	122.6	82.5	298.9
	632.5	946.6	1,725.0	2,092.2	2,046.9	2,069.6	1,550.8	1,421.7	1,433.2	1,380.2
Soybean meal Wholesale price, 44% protein. Decatur (\$10n) Production (1.000 ton) Domestic disap. (1,000 ton) Exports (1,000 ton) Stocks, beginning (1,000 ton)	154.88	162.61	221.90	233.46	215.50	217.10	169.10	171.32	172.40	176 90
	24,951.3	27,758.8	28.080 2	24,942.7	1,804.4	1,758.6	2,183.4	2,196.6	2.237.1	2,187.3
	19.117.2	20,387.4	21.275.9	19.792.5	1,740.1	1,578.1	1,757.8	1,903.0	1.955.9	1.855.8
	6,009.3	7,343.0	6.871.0	5,130.8	177.1	159.7	415.6	288.4	316.9	245.3
	386.9	211.7	240.2	153.5	284 9	152.0	252.6	282.5	267.7	232.0
Margarine, wholesale price, Chicago, white (cts./lb.)	51.2	40.3	40.3	52.3	51.6	52.2	63.6	63.6	62.5	61,9

<sup>\*</sup> Beginning September 1 for soybeans; October 1 for soymeal & oil; calendar year for margarine. Note: Soybean meal & oil data for Aug 1989 are corrected from last month.

Information contacts: Roger Hoskin (202) 219-0840, Tom Bickerton (202) 219-0824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

					Payment rates				
	Target price	Loan rate	Findley loan rate	Deficiency	Paid land diversion	PIK	Base acres 1/	Program 2/	Particl- pation rate 3/
			\$/bu.			Percent 4/	Mil.		Percent of base
Wheat 1984/85 1985/86 1986/87 5/ 1987/88 1988/89 1989/90 1990/91	4.38 4.38 4.38 4.38 4.23 4.10 4.00	3.30 3.30 3.00 2.85 2.76 2.58 2.44	2.40 2.28 2.21 2.08 1.95	1.00 1.08 1.98 1.81 0.89 7/ 0.32 1.00	2.70 2.70 2.00 —	1.10	94 0 94.0 91.6 87.6 84.8 82.3 80.5	20/10/10-20 20/10/0 22.5/2.5/5-1D 27.5/0/0 27.5/0/0 10/0/0 * 5/0/0	60/60/20 73 85/85/21 88 86 78 80
Rice			\$/cwt						
1984/85 1985/86 1985/87 1985/87 1987/88 1988/89 1989/90 1990/91	11.90 11.90 11.90 11.86 11.15 10.80 10.71	8.00 8.00 7.20 6.84 6.63 6.50 8.50	6/ 3.16 6/ 3.82 6/ 5.77 6/ 6.30 6/ 6.50	3.76 3.90 4.70 4.82 4.31 3.56 3.71	3.50		4.1 4.2 4.2 4.1 4.1 4.1 4.2	25/0/0 20/15/0 35/0/0 35/0/0 25/0/0 25/0/0 20/0/0	85 90 94 96 94 95 92
Corn			\$/bu.						
1984/85 1985/88 1986/87 5/ 1987/88 1988/89 1989/90 1990/91	3.03 3.03 3.03 3.03 2.93 2.84 2.75	2.55 2.55 2.40 2.28 2.21 2.06 1.96	1.92 1.82 1.77 1.65 1.57	0.43 0.48 1.11 1.09 7/ 0.36 7/ 0.58 0.15	2.00		80.8 84.2 81.7 81.5 82.9 82.7	10/0/0 10/0/0 17.5/2.5/0 20/15/0 20/10/0; 0/92 10/0/0; 0/92 10/0/0; 0/92	54 69 90 90 87 80 76
Sorohum			\$/bu						
Sorghum 1984/85 1985/86 1986/87 5/ 1987/88 1988/89 1989/90 1990/91	2.88 2.88 2.88 2.88 2.78 2.70 2.61	2.42 2.42 2.28 2.17 2.10 1.96 1.86	1.82 1.74 1.65 1.57 1.40	0.46 0.46 1.08 0.82 0.48 7/ 0.86 0.21	0 65 1 90 1 85		18.4 19.3 19.0 17.4 16.8 16.2 15.4	8/ (same)	42 55 75 84 62 71 75
Barley			\$/bu.						
1984/85 1985/86 1986/87 5/ 1987/88 1988/89 1989/90 1990/91	2 60 2 60 2 60 2 60 2 51 2 43 2 36	2.08 2.08 1.95 1.86 1.80 1.68	1.58 1.49 1.44 1.34 1.28	0.28 0.52 0.99 0.52 1.04 7/ 0.23 0.28	0.57 1.60 1.40		11.6 13.3 12.4 12.5 12.5 12.4 11.9	8/ (same)	44 57 72 84 79 69
Oats			\$/bu.						
1984/85 1985/86 1985/87 1986/87 5/ 1987/88 1988/89 1989/90 1990/91	1.60 1.60 1.60 1.55 1.50	1.31 1.23 1.17 1.13 1.06 1.01	0.99 0.94 0.90 0.85 0.61	0.00 0.20 0.39 0.20 0.30 0.00	0.36		9.8 9.4 9.2 8.4 7.0 7.5	8/ (same) 5/0/0; 0/92 5/0/0; 0/92 5/0/0; 0/92	14 14 37 45 30 23
Soybeans 9/			\$/bu.						
1984/85 1985/86 1986/87 5/ 1987/88 1988/89 1989/90 1990/91		5.02 5.02 4.77 4.77 4.77 4.53 4.50			5		TOTAL SERVICE	10/ 10/25 10/ 0/25	
Upland cotton 1984/85 1985/86 1986/87 5/ 1987/88 1988/89 1989/90 1990/91	81.0 81.0 81.0 79.4 75.9 73.4 72.9	55.00 57.30 65.00 52.25 51.80 50.00 50.27	11/ 44.00 12/ — 12/ —	18.60 23.70 26.00 17.3 19.4 13.1 6.3	30.00		15.6 15.9 15.5 14.5 14.5 14.5	25/0/0 20/10/0 25/0/0 25/0/0 12.5/0/0 25/0/0 12.5/0/0	70 82/0/0 93 93 89 89

1/ Includes planted area plus acres considered planted (ARP, PLD, 0-92 etc). Net of CRP, 2/ Percentage of base acres that farmers participating in Acreage Reduction Programs/Paid Land Diversion/PiK were required to devote to conserving uses to receive program benefits. 3/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PiK. 4/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1984 PIK rates apply only to the 10-20 portion. 5/ Rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Annual everage world market price. 7/ Guaranteed to farmers signed up for 0/92. 8/ The sorghum, oats, a barley programs were the same as for corn in each year except 1988-90, when the oats ARP was lower than for the other feed grains. 9/ There are no target prices, acreage programs, or payment rates for soybeans. 10/ Soybean program data refer to percent of program crop base permitted to shift into beens without loss of base. 11/ Loan repayment rate. 12/ Loans may be repaid at the lower of the loan rate or world market prices. \*On September 13, the Secretary announced that participating farmers have the option of planting up to 105 percent of their wheat base to boost 1990 aupplies. For every acre planted in excess of 95 percent of base, the acreage used to compute deficiency payments will be cut by 1 acre. — = not available.

Information contact: James Cole (202) 219-0840.

Table 23.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/ Production (1,000 ton) Per capita consumpt. (lbs.) 2/	12,139 24.7	13.682 29 4	10,832 24.0	10.525 22.6	11,058 26.0	11,993 25.7	12.761 27.1	13,186 24.4	13,441
Noncitrus 3/ Production (1,000 Ione) Per capita consumpt, (lbs.) 2/	14,658 62.7	14,168 63.6	14,301 67,5	14,191 86,5	13,874 69.5	16,011 75,1	15,884 71.9	18.300 72.2	14,317
					1990				
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
F.o.b. shipping point prices Apples (\$/carton) 4/ Pears (\$/box) 5/	11.00 13.85	11.00 14.00	11.00 14.00	11.00 14.00	11.28 15.88	13.85	19.88	11.95	12.16
Grower Prices Oranges (\$/box) 6/ Grapefruit (\$/box) 6/	5.52 5.50	8.04 7.35	7.20 7.57	7.84 7.82	7.15 8.74	6.02 6.35	5.07 6.44	5.31 7.22	4.48 8.51
Stocks, ending Frash apples (mil. lbs.) Frash pears (mil. lbs.) Frozen fruits (mil. lbs.)	2.024.6 153.0 661.7	1,399.6 104.8 609.0	1.004.3 63.0 591.0	589.8 25.9 <b>583.</b> 7	283.9 2.3 653.2	118.9 33.8 790.8	8.8 199.8 859.5	3.005 578.0 864.5	4,590.0 449.0 894.5
Frozen orange juice (mll. lbs.)	1.041.5	1,119.2	1.170.0	1,586.2	1,074.8	1.008.1	808.4	797.1	793.9

<sup>1/ 1990</sup> indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton by pack. 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135'a. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Table 24.—Vegetables

14017 - 11 1 - 3 - 1 1										
_					Cale	ndar year				
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Production Total vegetables (1,000 cwt) Frash (1,000 cwt) 1/3/ Processed (tons) 2/3/ Mushrooms (1,000 cbs.) Potatoes (1,000 cwt) Sweetpotatoes (1,000 cwt) Dry edible beans (1,000 cwt)	395.225 179.416 10,790,440 469,576 303,905 10,953 26,729	392.343 183,456 10,444.330 517,146 340,623 12,799 32,751	430,795 193,451 11,867,170 490,826 355,131 14,833 25,563	403,509 185,782 10,886,350 561,631 333,726 12,083 15,520	456.334 201.817 12.725.860 595.681 362.039 12.902 21.070	453,030 203,549 12,474,040 567,956 408,609 14,573 22,175	448,629 203,165 12,273,200 614,393 361,743 12,368 22,886	478,381 220,539 12,892,100 631,819 389,320 11,611 26,031	470,222 230,484 11,986,910 567,759 356,438 10,945 19,253	544.195 240.360 15.191.740 715.010 370.494 11.358 24.333
						1990				
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Qct
Shipments Fresh (1,000 cwt) 4/ Potatoes (1,000 cwt) Sweetpotatoes (1,000 cwt)	21,552 13,096 301	17.748 10.738 255	19,860 12,095 251	22,475 12,809 331	35,292 16,062 268	30,291 10,136 167	21,826 8,255 109	22.032 10.029 101	14.898 8,959 302	20.451 11,947 562

<sup>1/</sup> Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onlone, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & destinower. 3/ Asparagus & cucumber setimates were not available for 1982 & 1983, 4/ Includes anap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggpiant, lettuce, onlone, bell peppers, equash, tomatoes, cantaloupes, honeydews, & watermaions. — = not available.

Information contacts: Gary Lucier or Cathy Greene (202) 219-0884.

Table 25.—Other Commodities

			Annual			1	989		1990	
	1985	1986	1987	1988	1989	July-Sept	Oct-Dec	Jan-Mar	Apr-june	July-Sept
Sugar Production 1/	5,969	6.257	7,309	7.087	6.827	817	3.709	1.671	572	852
Deliveries 1/	8.035	7.786	8,167	8.188	8,309	2,161	2,190	1,968	2.048	2,308
Stocks, ending 1/ Coffee	3.126	3.225	3,195	3.132	2.033	1,224	2.933	3,112	2,165	1,210
Composite green price N.Y. (cts./lb.)	137.46	185.18	109.14	115.59	95.17	72.29	63.70	73.22	78.55	79.10
imports, green bean equiv. (mil. lbs.) 2/	2,550	2,596	2.638	2,072	2,630	784	725	886	702	530
		Annuel		1	989			1990		
	1987	1988	1989	May	Dec	Jan	Feb	Mar	Apr	May
Tobacco Prices at suctions 3/				,						
Flue-cured (\$/lb.)	1.59	1.81		-	_	-		_		
Burley (\$/lb.) Domestic consumption 4/	1.56	1.51			1.68	1.68	1.67	_		
Cigarettes (bil )	575.0	562 5	540.1	52.8	34.4	38.4	41.1	48.5	45.3	47.2
Large Cigare (mil.)	2.728	2.531	2,467.6	240.7	187.0	165.5	164.3	198.5	174.2	205.0

<sup>1/ 1,000</sup> short tone, rew value. Quarterly data shown at end of each quarter. 2/ Net Imports of green & processed coffee. 3/ Crop year July—June for flue—cured. Oct.—Sept. for burley. 4/ Taxable removals. — = not available.

Information contact. Wynnice Napper (202) 219-0884

Information contacts: sugar, Peter Suzzanell (202) 219-0886, coffee, Fred Gray (202) 219-0888, tobacco. Verner Grise (202) 219-0890.

# World Agriculture

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1984/85	1985/86	198€′87	1987/88	1988/89	1989/90 P	1990/91 F
				Million units			
Wheat Area (hectares) Production (metric tons) Exports (metric tons) 1/ Consumption (metric tons) 2/ Ending stocks (metric tons) 3/	231.2	229.6	228.2	220.0	218.0	225.5	231.2
	511.9	500.1	530.7	502.3	500.3	536.5	594.3
	107.0	85.0	90.7	105.0	96.8	98.6	95.9
	493.0	496.2	522.5	530.2	531.5	536.7	567.3
	164.4	168.3	176.4	148.5	117.4	117.1	144.2
Coarse grains Area (hectares) Production (metric tons) Exports (metric tons) 1/ Consumption (metric tons) 2/ Ending stocks (metric tons) 3/	334.6	341.3	336.5	324.3	326.1	323.4	322.0
	815.8	843.1	831.8	793.9	731.4	800. <del>6</del>	820.7
	100.4	83.2	83.7	83.2	94.5	100.3	89.4
	782.6	778.8	806.0	814.9	797.6	826.7	824.4
	143.9	208.2	234.0	213.0	146.7	120.5	116.9
Rice, milled Area (hectares) Production (metric tons) Exports (metric tons) 4/ Consumption (metric tons) 2/ Ending stocks (metric tons) 3/	144.2	144.9	145.2	141.5	145.6	146.2	145.8
	318.9	318.9	318.7	314.0	331.0	340.8	348.0
	11.3	12.8	12.9	11.9	15.1	12.1	13.1
	310.2	319.4	322.7	319.8	328.9	335.0	344.3
	56.0	55.4	51.4	45.6	47.6	53.4	57.1
Total grains Area (hectares) Production (metric tons) Exports (metric tons) 1/ Consumption (metric tons) 2/ Ending stocks (metric tons) 3/	710.0	715.8	709.9	685.8	689.7	695.1	699.0
	1.646.6	1 662.1	1,081.2	1,610.2	1,562.7	1.677.9	1,763.0
	218.7	180.8	187.3	200.1	206.4	209.0	198.4
	1.585.8	1,594.4	1,651.2	1,664.9	1,658.0	1,698.4	1,736.0
	364.3	431.9	461.8	407.1	311.7	291.0	318.2
Oilseeds Crush (metric tons) Production (metric tons) Exports (metric tons) Ending stocks (metric tons)	150.7	155.1	161.4	167.7	165.5	172.5	178.0
	191.1	196.2	194.4	209.5	202.9	211.6	216.4
	33.1	34.5	37.7	39.5	31.9	35.6	33.7
	21.1	26.8	23.3	24.0	22.3	22.4	21.6
Meals Production (metric tons) Exports (metric tons)	101,8	105 0	110,5	115.1	111.7	117. <b>5</b>	120.5
	32.3	34.4	36, <del>8</del>	36.3	38.2	38.3	39.3
Oils Production (metric tons) Exports (metric tons)	46.2	49 4	50.3	53.2	53.8	57.1	58.5
	15.6	16.4	16.9	17.7	18.4	19.5	19.4
Cotton Area (hectares) Production (bales) Exports (bales) Consumption (bales) Ending stocks (bales)	33.9	31.9	29.9	31.1	33.8	32.3	33 6
	88.2	79.8	70.4	81.2	84.7	79.9	87.2
	20.2	20.4	26.0	23.1	25.9	24.2	24.6
	70.0	75.7	82.5	84.1	85.6	87.0	86.3
	42.3	47.2	35.2	31.4	30.2	23.6	23.6
	1985	1986	1987	1988	1989	1990 P	1991 F
Red meat Production (metric tons) Consumption (metric tons) Exports (metric tons) 1/	103.8	106.5	109.6	113.4	115.2	114.4	118.1
	101.5	105.4	107.9	111.7	113.8	113.8	115.0
	8.3	6.7	6.6	6.9	7.2	6.5	6.9
Poultry 5/ Production (metric tone) Consumption (metric tone) Exports (metric tone) 1/	26.2 25.8 1.2	29.3 28.9 1.2	31.3 30.8 1.5	32.9 32.5 1.7	34.1 33.8 1.8	35.7 35.2 2.0	37.2 36.7 2.1
Dairy Milk production (metric tons)	413.4	425.9	425.9	429.1	434.8	441.0	443.3

<sup>1/</sup> Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1985 data correspond with 1984/85, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = prefiminary. F = forecast.

Information contacts: Crops, Frederic Suris (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

# **U.S. Agricultural Trade**

Table 27.—Prices of Principal U.S. Agricultural Trade Products

		Annual		1989				1990		
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Export commodities Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.11	3.97	4.65	4.50	4.10	3.69	3.41	3.21	3.14	3.16
Corn, f.o.b. vessel, Guif ports (\$/bu )	1.95	2.73	2.85	2.73	3.00	3.06	2.93	2.80	2.00	2.55
Grain sorghum, f.o.b. vessel,										
Gulf ports (\$/bu.)	1.88	2 52	2.70	2.60	2.84	2.79	2.79	2.67	2.52	2.5
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	<b>5</b> .55	7.81	7.06	5.95	6.40	8.23	8.32	8.42	8.45	8.33
Soybean oil, Decatur (cts./ib.)	15.85	23.52	20.21	18.73	24.49	24.96	24.54	24.78	23.89 175.79	22.09 172.49
Soybean meal, Decatur (\$/ton)	175.57	234.75	216.59	191.93	176.98	169.50	171.30	171.09	175.79	172.48
Cotton, 8-market avg, spot (cts./lb.)	64.35	57.25	63.78	69.70	74.61	77.06	79.53	78.27	71.01	70,54
Tobacco, avg. price at auction (cts./lb.)	144 32	153.01	151.56	162.84	164.68	164.68	181.00	159.51	170.20	168.82
Rice, f.o.b. mill, Houston (\$/cwt)	13.15	19.60	15.68	18.50	16.25	18.25	18.25	15.81	14.50	14.50
Inedible tallow, Chicago (cts./lb.)	13.79	16.64	14.71	15.25	13.51	14.01	13.50	10.12	12.00	13.25
Import commodities	4.44	4.04	4.44						4 -4	
Coffee, N.Y. epot (\$/lb.)	1.09	1.21	1.04	0.71	0.84	0.78	0.75	0.81	0.87	0.85
Rubber, N.Y. spot (cts./lb.)	50.65	59.20	50.65	46.08	45 80	48.00	45.80	47.48	48.43	46.50
Cocoa beans, N.Y. (\$/lb)	0.87	0.69	0.55	0.48	9.63	0.57	0.58	0.55	0.59	0 57

Information contact: Mary Teymourian (202) 219-0824.

Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates<sup>1</sup>

		_			_						
						1990					
	Jan	Feb.	Mar	Apr P	May P	June P	July P	Aug P	Sept P	Oct P	Nov P
					1	985 = 100					
Total U.S. trade 2/	67.7	67.2	68.6	87.9	66.8	<del>0</del> 7.3	65.5	63.4	63.2	61.4	60.3
Agricultural trade											
Ŭ.S. markets	78.3	78.1	79.3	79.4	78.5	78.9	79.3	79.2	78.8	77.4	78.9
U.S. competitors 3/	80 1	81.2	79.5	79.8	79 5	77.5	78.5	78.1	78.5	7 <del>8</del> .5	78.3
Wheat											
U.S. markets	69.2	89.1	89.1	90.0	89.0	90.4	93.0	96.5	96 3	98 2	97.1
U.S. competitors 3/	79.6	82.3	80.5	79.8	79.5	75.5	73.3	72 4	72.7	72.8	72.5
Sovbeans											
U.S. markets	69.3	69.0	70.6	70.5	69.5	69.8	68.4	67.0	66.4	64.4	63.5
U.S. competitors 3/	82.1	87.7	77.3	79.9	80.0	66.9	63.9	64.3	64.7	64.9	65.1
Corn											
U.S. markets	72.7	72.5	74.3	74.8	73.3	73.8	74.0	73.8	72.4	70.2	69.1
U.S. competitors 3/	85.1	89.7	85.6	85.1	84.7	74.5	71.1	70.2	70.0	69.7	69.4
Cotton											
U.S. markets	78.0	78.2	77.7	78.0	76.8	77.4	78.4	75.6	75.0	73.3	72.8
U.S. competitors	84.4	84.5	83.5	83.0	82.1	81.1	89.4	91.3	91.6	91.9	92.1

<sup>1/</sup> Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used, 2/ Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. 3/ Substantial devaluations of the Argentine australe & Brazilian cruzado resulted in a sharp increase in the December, 1989, & subsequent values of these indices. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

Table 29.—Trade Balance

					Fiscal year 1	1			Sept
	1984	1985	1988	1987	1988	1989	1990	1991 F	1990
E					\$ million	1			
Exports Agricultural Nonagricultural Total 2/	38,027 170,914 208,041	31,201 179,236 210,437	26,312 179,291 205,603	27.876 202.911 230,787	35,31 <b>6</b> 258,656 293,972	39. <b>6</b> 37 301.222 340,859	40,182 325.928 366,110	38.5	2,723 27,138 29,659
Imports Agricultural Nonagricultural Total 3/	18.918 297,738 318,852	19,740 313,722 333,462	20.884 342.848 363.730	20,650 367.374 388,024	21,014 409,138 430,152	21.477 441.074 462.551	22,514 458,147 480,661	22.0	1,728 38,511 40,239
Trade balance Agricultural Nonagricultural Total	19,111 -127,722 -108,811	11,461 -134,486 -123,025	5,428 -163,555 -158,127	7.226 -164,463 -157,237	14,302 -150,482 -136,180	18,160 -139,852 -121,692	17,688 -132,219 -114,551	18.5	995 -11,375 -10,380

<sup>1/</sup> Frecal years begin October 1 & and September 30. Fiscal year 1990 began Oct 1, 1989 & anded Sept. 30, 1990. 2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 30.—U.S. Agricultural Exports & Imports

		Flecal ye	ar*	Sept		Fiscal y	ear*	Sept
	1989	1990 F	1991 F	1990	1989	1990 F	1991 F	1990
EXPORTS			1,000 units				\$ million	
Animals, live (no.) 1/	758	685	_	49	475	361	_	41
Meate & preps., excl. poultry (mt)	869 192	876 92	2/ 700	70 3	2.355	2,457	500	213
Dairy products (mt) 1/ Poultry meats (mt)	428	567	600	46	475 510	348 631	- 500	27 50
ats, oils, & greases (mt)	1,377	1.264	1,200	101	531	459		35
Ildes & skins incl. furskins Cattle hides, whole (no.) 1/	26,280	24.777	_	1,869	1,713	1,798	_	131 108
Mink pelts (no.) 1/	3,073	5,128	_	102	91	116	_	3
raine & feeds (mt)	114,692 37,641	112,987 27,999	27,500	7,057	16,829	15,694	3/13.800	959
Wheat (mt) Wheat flour (mt)	1,176	882	1,200	2.902 57	8.004 255	4.209	4/3,300	340 12
Rice (mt)	3.041	2,501	2.400	207	955	829	800	8.5
Feed grains, incl. products (mt) Feeds & fodders (mt)	60.958 11.086	89,510 11,125	59,800 5/11,900	3.247 693	7.37 <b>4</b> 1,84 <b>9</b>	8.093 1,828	7,000	385 115
Other grain products (mt)	790	970		51	514	665	_	53
ruits, nuts, and preps (mt) ruit juices incl.	2,555	2.873	_	285	2,394	2,789	_	290
roz. (1,000 hectoliters) 1/ egetables & praps. (mt)	4.997 1,665	5.975 2.243	_	554 142	264 1.542	328 2.079	-	29 147
obacco, unmanufactured (mt)	212	220	200	12	1.274		1,400	74
otton, excl. linters (mt)	1,441	1,666	1,800	90	2,040	1.373 2,704	2,700	145
eeds (mt) ugar, cane or beet (mt)	511 368	576 447		104 42	507 134	578 187	600	. 56
Pilseede & producte (mt)	21.052	23,772	_	1,131	8.829	6.098	8,200	326
Dilseed# (mt) Soybean# (mt)	14,592 14,093	17.703 17,217	16.600	785 <b>7</b> 52	4,363 4,085	4,248	2 000	20- 18:
Protein meal (mt)	4.963	4,767	10.000	250	1,358	3.939 1,022	3.900	5
regetable oils (m1)	1,498	1,302		96	908	830	_	71
ssential Olis (mt) ther	13 106	14 89		1 8	171 1.802	182 2,120	=	12 167
Total .	145,481	147,686	139,500	9.092	39.637	40,182	38,500	2,723
WPOATS								
nimals, live (no.) 1/ leats & preps., excl. poultry (mt)	·2,485 1,091	2.940 1.142	_	184 94	740 2.432	1.053	1.100	84 239
Baef & veal (mt)	668	754	750	63	1.525	2.848 1.842	1.800	155
Pork (mt)	371	340	370	27	778	888	900	75
airy products (mt) 1/ outtry & products 1/	211	254	=	18	834	951	900	69
ats, oils, & greasee (mt)	14	19	=	1	130	129 15	=	
des & skins, Incl. fürskins 1/ ool, unmanufactured (mt)	62	47		3	241	135		
					319	187		11
rains & leeds (mt) ruits, nuts, & preps.,	3,467	3,471	3.450	288	1,139	1,181	1,000	100
exct. juices (mt) Sananas & plantains (mt)	5,036 3,039	5.331 3,238	5.050 3.200	354 263	2,2 <del>69</del> 851	2,486 926	900	170 73
ruit juices (1,000 hectolitérs) 1/	27,747	33,922	30,000	2,902	792	1,001	_	93
egetables & preps. (mt) obacco, unmanufactured (mt)	2,217 169	2.242	160	105	1.959	2.264	2,000	112
otton, unmanufactured (mt)	13	193 30	100	18	521 8	588 <b>20</b>	600	60
eds (mt)	158	171	170	3	187	164	200	
ursery stock & cut flowers 1/ ugar, cane or beet (mt)	1,857	1.769	_	211	4 <del>68</del> 620	519 734	=	50 68
ilseeds & products (mt)	1.917	2.034		155	946	964	1,000	68
Dilseeds (mt) Protein meal (mt)	424 359	534 310		40 22	159 65	,206 48		12
/egetable olls (mt)	1,133	1,189	_	93	721	710	-	54
everagee excl. fruit juices (1,000 hectoliters) 1/	13,967	13.543	_	1.081	1,815	1.667	_	150
offee, tea, cocoa, spices	1,867	2.202	3.200	135	3,898	3.465		235
Coffee, Incl. products (mt) Cocos beans & Products (mt)	1,064 564	1.290 698	1,300 670	77 41	2.467 969	1,997 1,042	2,000 1,000	122 76
ubber & aliled gums (mt)	927	840	850	83	1,051	712	700	72
ther		_	_	-	1.097	1.229	_	100
Total .	_		-	_	21.477	22.514	22.000	1,728

<sup>&</sup>quot;Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1989 began Oct. 1, 1988 & ended Sept. 30, 1989. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/-8/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m., tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. Fig. forecast. — = not svailable.

Information contact: Stephen MacDonald (202) 219-0822.

Table 31.—U.S. Agricultural Exports by Region .

		Fiscal year		Sept	Char	ige from yea	r* earlier	Sept
Region & country	1989	1990 F	1991 F	1990	1989	1990 F	1991 F	1990
		\$	million				Percent	
WESTERN EUROPE European Community (EC-12) Belgium-Luxembourg France Germany, Fed. Rep. Italy	7,074 6,585 431 474 918 809	7,331 6,838 431 469 1,096 704	7,300 6,800 ———————————————————————————————————	399 357 17 32 69 45	-12 -12 1 -18 -28 -15	4 4 0 -1 19 16	 	-8 -7 -44 11 34 28
Netherlands United Kingdom Portugal Spain, Incl. Canary Islands	1,647 736 307 876	1,637 761 338 991		62 64 2 30	-12 -10 -10 3	-11 3 10 13	=	-23 -13 -56 40
Other Western Europe Switzerland	510 166	493 171	500	42 7	-2 -14	-3 3	<u>°</u>	-18 -40
EASTERN EUROPE German Dem. Rep. Poland Yugoelavia Romania	422 72 45 76 62	533 58 101 129 210	500 	44 0 5 35 2	-24 8 -73 -26 -33	26 -20 127 69 239	-	153 -100 229 1,125 06
USSR	3,299	3,989	2.000	9	70	-8	-33	-50
ASIA West Asia (Mideast) Turkey Iraq Iarael, Incl. Gaza & W. Bank Saudi Arabia	18, <b>677</b> 2,273 238 791 331 482	18,131 1,995 259 497 285 502	17,400 2,000 0 0	1,274 109 18 0 4	17 19 97 8 -1 <sup>2</sup>	-3 -12 9 -37 -14	-100 -100 -20	-17 -58 -35 -100 -88 -3
South Asia Bangladesh India Pakistan China Japan	1,161 213 243 599 1,496 8,148	729 125 115 391 909 8.106	300 600 8,100	77 27 10 30 91 543	44 98 -31 117 144 12	-37 -41 -53 -35 -39 -1	 -25 -33 0	-36 27 42 -61 -34 -7
Southeast Asim Indonesia Philippines	976 218 344	1,184 277 351	400	81 13 ,31	-4 -9 "0	21 28 2		-18 -28 -29
Other East Aeia Taiwan Korea, Rep. Hong Kong	4,623 1,594 2,453 675	5,20 <b>7</b> 1,818 2,703 685	4,900 1,600 2,600 700	374 134 191 49	7, 19, 18,	13 14 10 19	-6 -11 -4 0	7 -10 27 -1
AFRICA North Africa Morocco Algeria Egypt Sub—Sahara Nigeria Rep. S. Africa	2,280 1,796 216 549 955 483 30 57	2,009 1,524 166 488 761 484 32 81	1,800 1,400  600 800 400	223 181 25 50 87 62 2	0 8 12 2 21 -21 -31 -34	-12 -15 -23 -11 -20 0 7 43	-10 -7 -20 0	30 -33 -32 -25 -34 -19 38
LATIN AMERICA & CARIBBEAN Brazil Caribbean Islands Central America Colombia Mexico Peru Venezuela	5,437 149 1,007 448 139 2,755 81 587	5,156 105 1,006 484 147 2,666 187 345	5,300 100 — — 2,800 400	421 11 71 48 6 209 10 44	24 -15 16 8 -22 60 -54 -2	-5 -30 0 4 6 -3 132 -41	0   4 33	-8 -60 2 0 -41 -16 208 63
CANADA	2,179	3,716	4,000	320	1.0	71	8	68
OCEANIA Total	268 39,637	317 40,182	300 38,500	32 2, <b>72</b> 3	13 12	18 1	0 -4	52 -9
Developed countries	17,997	19,780	20.100	1,300	1	10	5	3
Less developed countries	16,423	15,970	15,300	1,279	14	-3	-4	-18
Centrally planned countries	5.217	4,431	3,100	144	68	-15	-30	-17

<sup>\*</sup>Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. F = forecast. — # not available. Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

## Farm Income

Table 32.—Farm Income Statistics

						Calendar y	reer					
	1981	1982	1983	1984	1985	1986	1967	1988	1989	1990 F	1	991 F
					;	\$ billion						
Farm receipts     Crops (Incl. net CCC loans)     Livestock     Farm related 1/	144.1 72.5 89.2 2.5	147.2 72.3 70.3 4.6	141.3 67.2 69.6 4.5	147.1 69 9 72.9 4.3	149.4 74.3 69.8 5.3	140.2 63.7 71.5 5.0	147.5 85.6 76.0 6.9	155.9 71.4 78.8 5.7	166.5 75.4 83.7 7.4	174 77 91 6	177 78 89 6	to 182 to 82 to 93 to 7
Direct Government payments     Cash payments     Value of PIK commodities	1.9 1.9 0.0	3.5 3.5 0.0	9.3 4.1 6.2	8.4 4.0 4.5	7.7 7.8 0.1	11.8 8.1 3.7	18.7 8.8 10.1	14.5 7.1 7.4	10.9 9.1 1.7	9 9 1		to 8 to 1
3. Total gross farm Income (4+5+5) 2/ 4. Gross cash income (1+2) 5. Nonmoney income 3/ 6. Value of Inventory change	186,3 146,0 13,8 6,5	183.5 150.6 14.3 -1.4	153.2 150.6 13.5 -10.9	170.2 155.5 8.7 6.0	162.9 157.2 8.0 -2.3	156.5 162.0 6.9 -2.4	164.3 7.5 -2.8	173.8 170.4 7.5 -4.1	189.2 177.5 7.3 4.4	193 184 8 3	195 185 7	to 200 to 190 to 8 to 4
7, Cash expenses 4/ 8. Total expenses	113.2 139.4	112.8 140.0	111.0 137.0	119.0 143.8	109.3 131.9	105.2 125.5	108.2 127.7	112.3 132.1	122.8 142.6	125 145	127 149	to 133 to 154
9, Net cash income (4-7) 10. Net farm income (3-8) Deflated (1982\$)	32.8 26.9 28.6	37.9 23.5 23.6	39.5 16.3 14.7	36.6 26.3 24.5	47.9 31.0 27.9	46.7 31.0 27.3	56.1 41.3 35.2	56.1 41.8 34.4	54.6 46.7 36.9	69 49 37	55 44 31	to 49 to 35
11. Off-farm income	35.8	36.4	37.0	39 2	55.2	54.6	56.9	57.7	67.6			-
12. Loan changes 5/: Real estate 13. 5/: Non-real estate	9.0 8.6	3.8 3.4	2.3 0.9	-2.0 -0.8	-6.4 -9.6	-8 7 -11.0	-7.7 -4.6	-4.1 -0.3	-2.1 0.1	_		=
14. Rental income plus monetary change 15. Capital expenditures 5/	6.4 18.8	6,4 13.3	5.4 12.7	9.2 12.5	9.1 9.2	8.0 8.5	ОВ 11.1	7.5 11.1	8.2 13.0	_		_
16. Net cesh flow (9+12+13+14-15)	37.8	38.2	35.3	30.4	31.9	26.6	39.5	50.2	48.0	_		_

1/ income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, periquisities to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. --- = not available.

Information contact: Diane Bertelsen (202) 219-0809.

Table 33.—Balance Sheet of the U.S. Farming Sector

					Calend	ar year 1/						
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	11	991 F
						\$ billion						
Assets						T DIMIGNI						
Real estate	784.7	748.6	758.2	610.3	540.8	507.3	525.4	555.4	577.8	595	600	to 810
Non-real estate	197.7	196.4	191.9	196.9	187.5	162.8	193.7	208.1	218.3	223	220	
Livestock & poultry Machinery & motor	53.5	53.0	49.5	49 5	46.3	47.8	58.0	65.5	69.7	74	74	to 78
vehicles	87.0	67.5	67.4	85.0	63.6	81.9	79.4	80.6	83 8	86	85	to 89
Crops stored 2/	29.0	26.1	24.0	28.2	22 9	16.7	18.0	23.0	23.5	23	21	to 25
Purchased inPuts	_			2.6	1.3	2.0	3.3	3.4	2.6	3	2	to 4
Financial assets	26.2	29.7	30.0	32.6	33.3	34.5	35.1	35.4	36.6	38	38	to 40
Total farm assets	982.4	945.2	950.1	807.2	726.3	690.1	719.1	763.5	793.9	616	825	to 635
Liabilities												
Real estate debt 3/	98.7	102.5	104.6	102.6	96.4	87.7	79.9	75.6	73.6	72	70	to 74
Non-real estate debt 4/	83.6	87.0	87.9	87.1	77.5	66.6	62.0	61.7	61.8	62	60	to 64
Total farm debt	182.3	169.5	192.7	169.9	173.9	154.2	142.0	137.6	135.6	134	131	to 137
Total farm equity	800.1	755 7	757.4	617.4	554.3	535.9	577.2	625.9	658.3	684	695	to 705
						Percent						
Selected ratios												
Debt-to-assets	16.6	20.0	20.3	23.5	23.9	22.4	19.7	18.0	17.1	16	16	to 17
Debt-to-equity	22.6	25.1	25.4	30.6	31.4	28.6	24.6	22.0	20.8	20		to 20
Debt-to-net cash Income	558	500	488	519	363	330	253	237	248	228	230	10 240

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast. — = not available.

Information contects: Ken Erickson or Jlm Ryan (202) 219-0798.

Table 34.—Cash Receipts From Farm Marketings, by State

01		Livestock	& products				Crope 1/				Total 1/	
Region & State	1988	1989	Aug 1990	Sept 1990	1988	1989	Aug 1990	Sept 1990	1988	1989	Aug 1990	Sept 1990
						\$ m	illion 2/					
NORTH ATLANTIC												
Maine New Hampshire Vermont Massachusetts	217 59 351	215 63 375	16 5 34	16 5 33	197 77 51	233 79 51	12	18 13 4	414 136 401	447 142 426	26 14 36	33 17 37
	105	112	9	9	305	317	30	48	410	429	39	55
Rhode leland Connecticut New York New Jersey Pennsylvania	13 183 1,803 193 2,332	13 186 1,946 197 2,595	1 16 181 17 228	1 15 173 16 229	865 452 964	218 911 463 986	2 14 109 44 84	21 26 131 40 100	79 398 2,668 645 3,296	79 404 2,857 660 3,581	3 30 290 61 312	22 41 304 56 329
NORTH CENTRAL												
Ohio Indiana Illinois Michigan	1,584 1,716 2,255 1,205	1,698 1,817 2,252 1,313	157 187 219 123	154 169 223 126	1,980 2,320 3,927 1,535	2,114 2,502 4,458 1,627	138 180 383 117	251 328 476 144	3,584 4,038 6,182 2,739	3,812 4,318 6,710 2,940	295 366 603 239	405 496 699 270
Wisconsin	4.215	4,337	397	361	764	941	129	144	4,980	5,278	528	505
Minneeota lowa	3,418 4,988	3,716 5,209	346 436	343 527	2,649 3,787	2,809	224	364 568	6,067 8,775	6,526 9,119	570 812	707 1095
Miesouri	2,012	2,168	180	197	1,746	3.911 1,732	37 <b>6</b> 97	174	3.758	3,900	277	371
North Dakota South Dakota Nebraska	851 2,050 5,390	542 2,108	43 182 599	63 195	1, <b>507</b> 895	1,465 884 2,878	150 86	200 108	2,358 2,945	2,108 2,992	193 268	262 302 826
Kansas	4,124	5.643 4,245	338	447 311	2,409 2,195	2,079	195 202	178 220	7,800 6,320	8.521 6.324	795 540	531
SOUTHERN												
Delaware Maryland	444 768	503 870	42 65	37	152	160	19	22	595	663	61	58
Virginia West Virginia	1,300 218	1,372 250	124	69 158 26°	457 614 68	476 685 64	25 48 7	55 87 12	1,224 1,914 286	1,346 2,058 314	90 173 28	124 245 38
North Carolina	2,188	2,505	207	227	1.850	2,046	331	435	4,038	4,551	538	661
South Carolina Georgia	490 2.016	551 2,270	48 198	50 197	616 1.554	67 <b>5</b> 1,598	79 115	77 364	1,106 3,570	1,225 3,8 <del>69</del>	127 313	127 581
Florida	1.132	1,221	126	111	4,688	4,982	180	170	5,820	6,203	286	281
Kentucky Tennessee	1,530	1,670 1,060	10 <b>7</b> 101	168	980 877	1,258 861	29 31	38 47	2,510 1,933	2.828 1.921	136 132	206 147
Alabama	1.695	1,932	174	174	728	696	27	118	2.422	2,628	200	292
Mississippi	1,172	1,292	123	122	1,133	1,000	36	76	2,305	2,292	159	199
Arkansas Louisiana	2.280 582	2,661 614	232 69	222 57	1,552 1,295	1.470 1.048	50 66	133 118	3.631 1.876	4,131 1, <del>8</del> 61	281 134	355 175
Oklahoma Texas	2.243	2,409	232 624	257 749	1.112 3.689	1,185 3,897	115	121	3,354	3,594 10,780	347	378
	6,562	6,663	024	/48	3,089	3,897	378	343	10.2\$1	10,700	1,002	1,092
WESTERN Montana	816	699	46	72	617	710	89	55	1.433	1,610	135	126
daho	1,039	1,046	91	99	1,285	1.670	130	175	2.324	2,715	221	274
Wyoming Colorado	584 2,666	669 2,649	38 221	100 273	1,034	186 1,250	17 108	20 100	761 3,700	856 3,899	56 329	120 373
New Mexico	909	974	81	93	375	450	51	48	1,283	1,424	132	139
Arizona	792	744	70	60	1,177	1,158	38	42	1,969	1,902	108	102
Utah Nevada	528 159	574 141	54 14	63	173 79	174 94	14	18 7	701 238	748 235	67 21	79 18
Washington	1,140	1,201	111	112	2,198	2,438	272	367	3,336	3,639	383	479
Oregon	673	739	68	68	1,508	1,558	180	231	2.182	2.297	249	300
California Alaska	4, <del>6</del> 82 10	5,093	441	405	11,970 20	12.422	931	1,293	16,652	17,515	1,373	1,698
Hawaii	89	92	8	å	490	495	2 41	40	30 <b>579</b>	29 587	3 48	3 48
UNITED STATES	78,821	83,724	7,453	7,697	71,372	75.449	5,980	8,163	150,192	159,173	13,432	15.860

1/ Seles of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding

Information contact: Roger Strickland (202) 219-0806.

Table 35.—Cash Receipts From Farming

				Annual			1989			1990		
	1984	1985	1986	1987	1986	3989	Sept	Меу	June	July	Aug	Sept
							,\$ million					
Farm marketings & CCC loans*	142,784	144,114	135,197	141,853	150.192	159,173	14,907	12.423	12.859	12.757	13,432	15,860
Livestock & producte	72.895	69.822	71,539	76.010	78,821	63.724	7.290	7,437	7.016	7,275	7.453	7.697
Meat animals	40,750	38,550	39,081	44,478	45,884	48.591	4,178	4.227	3.844	3,901	4,293	4.571
Dairy products	17.931	18.055	17,724	17,727	17,841	19,401	1.597	1,762	1,756	1,816	1,756	1,861
Poultry & eggs	12.245	11.209	12,701	11,517	12,887	15,346	1,306	1.266	1.245	1,178	1,238	1,256
Other	1.968	2,008	2,034	2.288	2.429	2,386	211	181	170	379	165	209
Сгоря	69,889	74,293	63,658	65.643	71,372	75.449	7.817	4,986	5.843	6,461	5,980	6,163
Food grains	9.731	8.990	5,741	5,780	7,464	8,073	725	426	1,458	1,065	890	903
Feed crops	18,138	22,591	16.912	14.543	14.305	16,858	1.583	1,356	1,610	1,492	1.594	1,783
Cotton (lint & seed)	3.674	3.687	3,371	4,189	4,548	4.740	247	197	120	119	234	340
Tobacco	2.813	2,699	1,921	1.826	1,960	2.381	493	0	0	175	439	483
Oil-bearing crops	13,641	12.475	10,614	11,294	13,537	12,172	1,404	605	616	465	543	1,522
Vegetablea & melons	9.152	8.572	8,849	9,889	9.754	11,340	1,234	1.098	874	724	974	1,188
Fruits & tree nute	6.734	6,946	7.248	8.058	9,139	9,020	975	480	650	803	988	977
Other	8,008	8.333	9.002	10,064	10,665	11.068	956	927	615	639	636	967
Government payments	8,430	7,704	11,813	15,747	14,480	10,887	254	638	151	50	97	119
Total	151.214	151,818	147,010	158,400	164.672	170,000	15, 161	13.059	13.010	12,807	13.335	15,741

<sup>\*</sup>Receipts from towns represent value of commodities placed under CCC towns minus value of redemptions during the month.

Information contact: Roger Strickland (202) 219-0606.

Table 36.—Farm Production Expenses

		Calendar year										
	1981	1982	1983	1984	1985	1986	1987	1988	1988	1	990 F	1991 F
					\$ million							
Feed Livestock Seed Farm-origin inputs	20,855 8,999 3,426 33,262	18,592 9,684 3,172 31,447	20,371 8.818 2,690 31.879	20,239 9,486 3,386 33,112	17,247 9,184 3,128 29,559	17.875 9.758 3,188 30.821	17.958 11,842 3,259 33,059	20,620 12,812 3,258 36,700	22,722 12,983 3,733 39,438	21,000 13,000 3,000 38,000	to 24.000 to 15,000 to 5.000 to 42,000	22,000 13,000 4,000 40,000
Fertilizer Fuels & oils Electricity Pesticides Manufactured inputs	9,409 8,570 1,747 4,201 23,927	8,018 7,734 2,041 4,282 22,076	6,959 7,211 1,962 3,870 20,022	8.574 7.296 2,060 4,688 22,618	7,506 6,438 1,878 4,334 20,153	6,813 5,310 1,795 4,324 18,242	6.453 4,957 2.156 4,512 18.077	6,775 4,921 2,231 4,443 18,370	7,554 5,321 2,100 5,721 20,697	6,000 5,000 2,000 5,000 22,000	to 9.000 to 8,000 to 3,000 to 7,000 to 24,000	7,000 6,000 2,000 6,000 21,000
Short-term interest Real estate interest 1/ Total interest charges	10,722 9,142 19,864	11.349 10,481 21,830	10,615 10,815 21,430	10.396 10.733 21,129	8,735 9,878 18,613	7.920 9.131 17,052	7,305 8,187 15,492	7.287 7,885 15,172	7,480 7,643 15,123	7,000 8,000 14,000	to 8,000 to 8,000 to 15,000	7,000 7,000 14,000
Repair & maintenance 1/2/ Contract & hired labor Machine hire & custom work	7.021 8.931 1.984	8,428 10,075 2,025	6,529 9,725 2,213	6,730 9,729 2,568	8,558 9,799 2,354	6.485 9.890 2.099	6.828 10.821 2,105	6.889 11,202 2,271	7.794 11.887 2.739	8,000 12,000 2,000	to 10,000 to 14,000 to 4,000	8,000 12,000 3,000
Marketing, storage, & transportation Misc, operating expenses 1/ Other operating expenses	3.523 6,909 26.369	4.301 7.262 30.089	3.904 9,089 31.461	4.012 9,136 32.173	4,127 8,198 31,034	3.852 8,054 30,180	3,988 8,902 32,044	3.281 9,357 33,000	4,214 9,857 36,491	4,000 10,000 38,000	to 6,000 to 12,000 to 42,000	5.000 10.000 38,000
Capital consumption 1/ Taxes 1/	23.573 4.246	24.287 4,050	23.873 4,123	21.623 4.166	19,648 4,484	17,700 4,549	16.475 4,982	16,716 5,090	17,310 <b>5</b> ,328		to 20,000 to 6,000	18,000 5,000
Net rent to nonoperator landford Other overhead expenses	6,184 34,003	6,174 34.511	5,110 33,106	8.978 34.787	8,435 32,567	8,951 29,209	8.964 28,420	7,014 26.820	8,181 30,619	8,000 31,000	to 10.000 to 35,000	8,000 32,000
Total production expenses	139.444	139.954	137.897	143.819	131.926	125,503	127,693	132.063	142.566	149.000	to 154,000	145,000

<sup>1/</sup> Includes operator dwellings. 2/ Beginning in 1982, miscelleneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Diane Berteleen (202) 219-0809.

Table 37.—CCC Net Outlays by Commodity & Function

					Fi	ecal year				
COMMODITY/PROGRAM	1982	1983	1984	1985	1986	1987	1988	1989	1990 E	1991 E
Feed grains					\$	million				
Согл	4,281	5,720	-934	4,403	10.524	12,348	8,227	2.863	2,638	1,865
	988	814	76	463	1,185	1.203	784	467	433	222
Grain eorghum						394	57	45	-88	37
Barley	129	268	89	336	471					
Dats	-1	11	5	2	26	17	-2	1	-7	0
Corn & oat products	0	2	6	7	5	7	7	8	8	9
Total feed grains	5,397	6,815	-758	5,211	12,211	13,967	9,053	3,384	2,984	1,933
Wheat	2,238	3,419	2,538	4,691	3,440	2,836	678	53	578	1,951
Rice	164	864	333	990	947	906	128	631	701	669
Upland cotton	1,190	1,363	244	1,553	2.142	1,786	666	1,481	-109	434
Tobacco	103	880	346	455	253	-346	-453	-367	-242	-223
Dairy	2,182	2.528	1,502	2,085	2,337	1,168	1,295	679	423	446
Soybeans	109	288	-585	711	1,597	-478	-1.678	-86	118	50
Peanute	12	-6	1	12	32	8	7	13	-6	3
Sugar	-5	49	10	184	214	-85	-246	-25	Q	.0
Honey	27	48	90	81	89	73	100	42	63	50
Wool	54	94	132	109	123	152	1/ 5	93	112	167:
211				0.10	457	505	014	600	627	634
Operating expense 3/	294	328	362	346	457	535	614.	620		
Interest expenditure	-13	3,525	1,064	1,435	1,411	1.219	395	65	653	527
Export programs 4/	65	398	743	134	102	278	200	-102	-39	67
1989/89 Disaster/										
Livestock Assistance	0	0	0	0	0	0	0	3.919	2/ 196	76
Other	-225	-1,542	1,295	-314	486	371	1,695	143	687	867
Total	11,652	18,851	7,315	17,683	25.841	22,408	12,461	10,523	6,742	7,651
FUNCTION										
Price-support loans (net)	7,015	8,438	~-27	6.272	13,828	12,199	4,579	-926	-276	197.
Direct payments										
Deficiency	1,185	2,780	812	6,302	6,166	4.833	3,971	5,798	4,158	4,584
Diversion	0	705	1,504	1,525	84	382	8	-1	0	0
Dairy termination	0	Q	0	0	489	587	280	168	178	100
Other	0	0	0	0	27	60	.0	42	1	11
Disaster	306	115	1	0	0	0	6	4	0	0
Total direct payments	1,491	3.600	2,117	7,827	6,746	5,862	4,245	6,011	4,337	4,695
1000/00		•		0	0	0	0	3,386	2/ 18	0
1988/89 crop disaster	0	0	0	u	V	, <b>Q</b> .	0	0,300	2 10	
Emergency livestock/	-	la.					0.4	500	460	78
forage assistance	16	0	0	0	1,870	-479	31 -1,131	533	180 -122	37
Purchasee (net) Producer storage	2,031	2,540	1,470	1,331	1,070	-478	-1,131	1101	-122	
payments	679	964	268	329	485	832.	658	174	175.	27
Processing, storage,										
& transportation	355	665	639	657	1,013	1,659	1,113	659	380	306
Operating expense 3/	294	328	382	348	457	535	614	620	627	634
			1,084	1,435	1,411	1,219	395	65	853	527
Interest expenditure	-13	3.525					200	-102	-39	67
Export programs 4/	65	398	743	134	102	276			811	1,085
Other	-281	-1,607	679	-648	329	305	1,757	-13	011	1,045
Total	11,652	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,742	7,651

<sup>1/</sup> Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Benefits to farmers under the Disaster Assistance Act of 1989 are being paid in generic certificates & are not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ includes Export Guarantee Program, Direct Export Credit Program, & CCC Transfers to the General Sales Manager. E = Estimated in the fiscal 1991 Mid-Session Review based on June, 1990 supply and demand estimates. Minus (-) indicates a net receipt (excess of replayments or other receipts over gross outlays of funds).

## **Food Expenditures**

Table 38.—Food Expenditure Estimates

				1990	19	1990 year-to-date			
	1987	1988	1989	Aug	Sept P	Oct P	Aug	Sept P	Oct P
				\$ bi	llion				
Sales 1/ Off-premise use 2/ Meals & snacks 3/	245,644 179,169	257,981 196,630	276,244 203,599	25.4 20.0	24.3 19.3	24-3 18.5	192.0 146.0	216.2 164.4	240.5 182.9
Sales 1/				198	9 \$ billion				
Off-premise use 2/ Meals & snacks 3/	273.160 195.095	273,94 <b>7</b> 202, <b>533</b>	276,372 203.565	23.8 19.0	22.7 17.3	22.6 17.5	140.3	203.5 157.6	226.2 175.1
			Pe	rcent chan	ge from year	rearlier (\$ b	il.)		
Sales 1/ Off-premise use 2/ Meals & snacks 3/	3. <b>5</b> 10.8	4.9 9.7	7,1 5.1	6.4 8.7	4 3 6.3	7.0 7.1	5.7 7.7	5.6 7:5	5.7 7.5
			Pe	rcent chan	ge from year	earlier (198	9 \$ bil.)		
Sales 1/									
Off-premise use 2/ Meals & snacks 3/	-0.8 6.5	0.3 3.8	0.9	0.2 3.7	-1.9 1.6	0. <del>6</del> 2.5	-1.1 2.7	-1.1 2.6	-1.0 2.6

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted, 2/ Excludes donations & home production, 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & matter. B = revised, P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not secondlic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates: (3) this series reports sales only, but PCE includes food produced & consumed on terms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector, "Agr.—Econ. Rpt. No. 575, Aug 1987.

Information contact: Alden Manchester (202) 219-0880.

# **Transportation**

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1989		1990					
	1987	1988	1989	Oct	May	énut	July	Aug	Sept	Oct	
Rail freight rate index 1/ (Dec. 1984=100) All products Farm products Grain Food products	100.1 99.3 98.7 98.6	104.8 105.6 105.4 103.2	106.4 108.4 106.7 103.9	106.8 108.2 108.1 104.1	107.1 109.9 109.7 105.2	107.1 109.5 109.2 104.9	107.0 P 109.5 P 109.0 P 104 3 P	107.1 P 110.7 P 110.5 P 104.4 P	107.1 P 111.7 P 111.0 P 104 4 P	107.9 P 112.1 P 111.4 P 105.5 P	
Grain shipments Rail cerloadings (1,000 cars) 2/ Fresh fruit & vegetable shipments Piggy back (1,000 cwt) 3/ 4/ Rail (1,000 cwt) 3/ 4/ Truck (1,000 cwt) 3/ 4/	29.0 588 660 9.137	30.7 535 607 9.679	28.4 504 599 9,738	29.0 408 480 9,121	25.8 P 598 590 11.646	27.9 P 572 802 12.749	25.8 P 438 414 <b>9</b> ,981	26.8 P 338 183 9,038	24.0 P 409 394 8.669	27.1 P 320 423 9.082	
Cost of operating trucks haufling produce 5/ Owner operator (cts./mile) Fieet operation (cts./mile)	116.3 11 <b>6.5</b>	118.7 118.4	124.1 1 <b>23</b> 4	125.5 124.5	127.2 126.7	128.4 125.8	126. <b>8</b> 126. <b>7</b>	133.9 135.5	135.4 135.1	138.2 137.5	

<sup>1/</sup> Department of Labor, Bureau of Labor Statistics 2/ Weekly everage; from Association of American Baltroads. 3/ Weekly everage; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1989 & 1990. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 219-0840

# Indicators of Farm Productivity

Table 40.—Indexes of Farm Production, Input Use, & Productivity

	1981	1982	1983	1984	1985	1988	1987	1988	1989 2/	1990 2/
					1:	977=100				
Farm output	118	<b>∄18</b> □	98	112	118	111	110	102	114	117
All livestock products 3/	109	107	109	107	110	110	113	116	116	117
Meat animale	106	101	104	101	102	100	102	105	104	101
Dairy products	108	110	114	110	117	116	116	148	117	120
Poultry & eggs	119	119	120	123	128	133	144	148	153	165
All crops 4/	117	117	88	111	11B	109	108	92	107	112
Feed grains	121	122	67	118	134	123	108	73	108	115
Hay & forage	108	109	100	107	106	106	102	89	101	102
Food grains	144	138	117	129	121	108	107	98	107	138
Sugar crops	107	96	93	95	97	106	111	105	105	102
Cotton	109	85	55	91	94	69	103	107	86	102
Tobacco	108	104	75	90	81	63	62	72	71	81
Oil crops	114	121	91	106	117	1,10	108	89	108	102
Cropland used for crops	102	101	88	99	98	94	88	88	90	
Crop production per acre	115	116	100	112	120	116	122	107	119	
Farm input 5/	102	99	97	95	92	87	86	*85	_	
Farm real estate	104	102	101	97	95	93	92	91		_
Machanical power & machinery	98	92	88	84	80	75	72	71		
Agricultural chemicals	129	11B	105	121	123	110	111	113		
Feed, seed, & livestock purchases	108	108	110	106	106	103	111	107		_
Farm output per unit of Input	116	a117	99	119	128	127	128	120		-
Output per hour of labor										
Farm 6/	123	125	99	121	139	139	142	134	1.49	
Nonfarm 7/	100	99	102	105	106	108	109	111	112	_

1/ For historical data & Indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1986, ECIFS 5–6. 2/ Preliminary indexes for 1989 based on Crop Production: 1989 Summary, released in January 1990, & unpublished data from the Agricultural Statistics Board.

NASS, 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown.

It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown.

6/ Economic Research Service, 7/ Bureau of Labor Statistics. — = not available.

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# Food Supply and Use

Table 41.—Per Capita Consumption of Major Food Commodities<sup>1</sup>

(See the November 1990 Issue.)

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